



2009 and 2010 Annual Reports

jackie.hendricks

to:

John Lovell

06/09/2011 10:56 AM

Show Details

## 2 Attachments



9778204\_21278\_fr.pdf Monitoring Data Form 2010.xls

*data incorporated into report*

Enclosed is the lab report from March 2009 with the priority pollutant scans on the influent and effluent. One of the pages from this report was missing from the submission of the 2009 Annual Report.

Also enclosed is the electronic copy of the spreadsheet submitted with the 2010 Annual Report.



**ANALYTICAL  
LABORATORY  
SERVICES, INC.**

[www.analyticalab.com](http://www.analyticalab.com)  
NELAP Accredited  
PA 22-293 NJ PA010



34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

## Certificate of Analysis

Project Name:	Outside Lab Testing For WWTP	Workorder:	9778204
Purchase Order:	2003000002502	Workorder ID:	09-1951,1952,1953,1967

Ms. Amy Morris  
City of Reading

PA

March 16, 2009

Dear Ms. Morris,

Enclosed are the analytical results for samples received by the laboratory on Wednesday, March 04, 2009

ALSI is a National Environmental Laboratory Accreditation Conference (NELAC) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAC.

If you have any questions regarding this certificate of analysis, please contact Denise Brooks (Project Coordinator) or Anna G Milliken (Laboratory Manager) at (717) 944-5541.

Please visit us at [www.analyticalab.com](http://www.analyticalab.com) for a listing of ALSI's NELAC accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

This laboratory report may not be reproduced, except in full, without the written approval of ALSI.

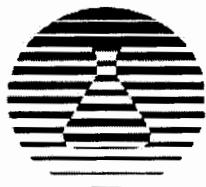
NOTE: ALSI has changed the report generation tool and while we have tried to retain the existing format, you will notice some changes in the laboratory report. Please feel free to contact ALSI in case you have any questions.

Analytical Laboratory Services, Inc.

CC: Ms. Jackie Hendricks

*This page is included as part of the Analytical Report and must be retained as a permanent record thereof.*

  
Anna G Milliken  
Laboratory Manager



**ANALYTICAL  
LABORATORY  
SERVICES, INC.**

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PA 22-293 NJ PA010



34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

**SAMPLE SUMMARY**

Workorder: 9778204 09-1951,1952,1953,1967

Discard Date: 03/27/2009

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9778204001	Raw Inf 09-1951	Waste Water	3/3/09 08:35	3/4/09 17:33	Customer
9778204002	Raw Inf 09-1952	Waste Water	3/4/09 08:36	3/4/09 17:33	Customer
9778204003	Final Eff 09-1963	Waste Water	3/3/09 09:15	3/4/09 17:33	Customer
9778204004	Final Eff 09-1967	Waste Water	3/4/09 09:15	3/4/09 17:33	Customer

**Workorder Comments:**

**Notes**

- Samples collected by ALSI personnel are done so in accordance with the procedures set forth in the ALSI Field Sampling Plan (20 - Field Services Sampling Plan).
- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- The Chain of Custody document is included as part of this report.

**Standard Acronyms/Flags**

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029

Ms. Deborah A. S. Hoag, P.E.  
Environmental Division Manager  
City of Reading  
815 Washington Street  
Reading, Pennsylvania 19601-3690

FEB 10 2011

Re: Pretreatment Program  
NPDES No. PA0026549

Dear Ms. Hoag:

Thank you for the timely and generally complete submission of the City's annual pretreatment report for calendar year 2009. Based on my review of the report, it appears that a page of the lab report for the influent priority pollutant scan was missing from the report. Data from the pesticides and PCBs fraction of the analysis was not included, and page 4 of 14 from the lab report for the scan was missing. If this data is available, please provide the results.

The report provided a summary of the penalties assessed for violations that occurred in calendar year 2009 along with the status of payment of those penalties. However, the report did not provide an update of the status of all of the unpaid penalties from calendar year 2008 and earlier violations. Enclosed are two tables that show the penalties that were listed as unpaid from the calendar year 2008 annual report for both calendar year 2008 and 2007. Please provide an update on the status of payment of these penalties.

In reviewing the 2009 annual reports, EPA has continued the program in which specific pretreatment implementation items for each approved program are being tracked. For calendar year 2009, a change was made in measure 11 so that this measure now looks at users that were in significant noncompliance for any two or more of the four evaluation periods during the year rather than only for the third and fourth evaluation periods. In addition, for measure 19 the overall rating must now be greater than or equal to 90.0 for a category 1 listing and less than or equal to 75.0 for a category 3 rating. A few other clarifications have been made to other measures as shown on the measures instruction sheet, although these clarifications generally do not impact the way the measures are evaluated. Enclosed is a sheet that includes the data that I have collected for the Reading pretreatment program for calendar year 2009, as well as a sheet that provides some additional information on the categories listed. An "Instruction Sheet" that provides more detail on each measure (with the revisions in bold) is also enclosed. Generally, the category ratings are not directly related to compliance, but "Category 1" would be considered the best rating for each measure. Finally, a summary of all of the POTW data collected so far for calendar year 2008 has been included to allow you to compare your program to the ratings



achieved by POTWs in calendar year 2008.

Measure 1 (influent data) is listed in category 2 for lead, mercury, and zinc, and in category 3 for molybdenum. Based on a review of the data submitted by the City since calendar year 2004 (see enclosed "List of Exceedances"), it appears that these exceedances continue similar exceedances for these pollutants from past years. This indicates that it is an ongoing issue that the City will need to address.

Measure 3 (sludge data) is listed in category 2 for lead. This is based on a single exceedance of the sludge goal. A review of the past data indicates that there was another exceedance of the sludge goal in calendar year 2007, which is also the only other year in which an influent exceedance for lead occurred. This suggests that the periodic elevated sludge levels may have been caused by slug loads. The City should evaluate the users that may have been responsible for this type of slug load and ensure that their slug control plans are up-to-date and address all potential sources of lead.

Measure 4 (data/local limits) is listed in category 2 for mercury, molybdenum, and zinc, and in category 3 for lead. Because the corresponding influent and sludge exceedances for lead suggest a potential industrial source, this is an issue that the City should pursue and address. As noted above review of user slug control plans would be appropriate, especially for users that have lead at their sites. For mercury, molybdenum, and zinc, the influent exceedances without corresponding effluent or sludge exceedances could suggest that the influent goal is more stringent than needed. Since the influent goals are based on the maximum allowable headworks loadings developed with the most recently accepted local limits evaluation, the City should reevaluate the local limits for these pollutants to ensure that the maximum allowable headworks loading is appropriate. However, the City should note that although there were no effluent or sludge exceedances for these pollutants in calendar year 2009, there have been exceedances for all three pollutants in the past and therefore the City would need to be cautious if the reevaluation shows that the influent goals for these pollutants can be relaxed.

Measure 6 (other NPDES violations) is listed in category 2 because of the ammonia violations that occurred in May of 2009. The City's report indicates that these violations were related to maintenance activities at the treatment plant and not related to industrial discharges. If that is the case, the violations are not a pretreatment issue, although the City is still responsible for complying with its NPDES permit.

Measures 8, 9, and 11 (SNC rates) are listed in category 3 and measure 12 (reporting SNC) is listed in category 2 because the number of users that were in significant noncompliance for the year remained relatively high. Although the City has significantly increased the amount of the fines levied against the users over the years, the City must continue to escalate its enforcement action where penalties alone are not sufficient to ensure that users return to and remain in compliance. In addition to payment of penalties, the City must ensure that the users take actions necessary, such as installation of treatment equipment, to eliminate future violations.

Measure 18 (streamlining) is listed in category 3 because the City has not submitted



revisions to its legal authority or enforcement response plan in response to EPA's amendments to the General Pretreatment Regulations on October 14, 2005. It has now been over five years since the regulatory amendments were made and the City must move quickly to revise its legal authority and enforcement response plan as required. You should have previously received information on the potential changes necessary to your legal authority. If you need another copy of this information, please let me know.

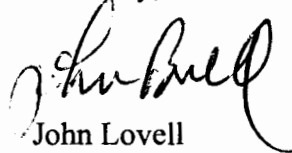
Measure 19 (overall rating) is listed in category 3 with a rating of 72.2. While this is slightly higher than the City's rating for calendar year 2008 (70.4), it is well below the average rating achieved by POTWs in calendar year 2008. The most significant issue is the noncompliance rates of the users, but the City will also need to address the influent and sludge exceedances to obtain a consistently high rating.

In a related matter, I have not received a complete response to some other issues that have been raised in the past regarding the City's pretreatment program. In August 2005 I conducted an audit of the City's pretreatment program. While the City has provided a response indicating how it has addressed a number of the required actions from the audit, I have not received a response to all of the required actions. Enclosed is a copy of the Audit Action Items table from the audit that has been updated to show my understanding of the current status of the City's efforts to address the required actions. Please provide a further update on the City's efforts to address these items. The City must ensure that it quickly addresses the remaining required actions from the audit. Failure to properly implement required actions could be considered a violation of the City's NPDES permit.

In addition, on June 28, 2006 I provided comments on the city's local limits reevaluation which was originally submitted on May 5, 2006. To date, I have not received a response to those comments or an updated local limits reevaluation. Given the influent exceedances noted above, it is important that the City complete the reevaluation and provide an updated submission.

Please provide a response to the issues raised above. If you have any questions regarding this matter, please contact me at 215-814-5790.

Sincerely,



John Lovell  
Pretreatment Coordinator  
NPDES Permits and Enforcement (3WP41)  
Water Protection Division

Enclosures

cc: Lee McDonnell, PADEP Southcentral Region (w/out enclosures)



## Reading Penalties Assessed but not Collected - 2008

IU Name	Penalty Date	Amount
Neversink Brewery	2/7/2008	\$100.00
St Joseph Medical Center	2/7/2008	\$500.00
Crescent Brass	9/2/2008	\$342.03
Muhlenburg Foods	9/5/2008	\$200.00
Paragon Optical	9/16/2008	\$1,000.00
Muhlenburg Foods	12/10/2008	\$600.00
Termaco	2/20/2009	\$100.00
Aramark Uniform Services	3/24/2009	\$800.00
Berks Packing	3/24/2009	\$500.00
George Weston Bakeries	3/24/2009	\$200.00
IFS Industries	3/24/2009	\$350.00
National/Yorgey's Cleaners	3/24/2009	\$400.00
Reading Eagle Company	3/19/2009	\$500.00
Remcon Plastics	3/19/2009	\$100.00
Sealed Air Corp	3/19/2009	\$100.00
Sweet Streets Desserts	3/19/2009	\$200.00

## Reading Penalties Assessed but not Collected - 2007

IU Name	Penalty Date	Amount
Carpenter	2Q'07	\$1,200.00
St Joseph Medical Center	4Q'07	\$500.00



## AUDIT ACTION ITEMS - City of Reading

Audit Date - August 23 - 24, 2005

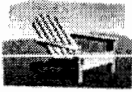
Requirement	Status	Completion Date (Estimate)
Legal Authority		
Evaluate legal authority based on streamlining changes and make necessary changes.	The City's evaluation indicated that it must revise the ordinances in order to address the required revisions.	
Application of Standards		
Maintain spreadsheet showing local limits allocations for each user.		
Reevaluate oil and grease program.		
Complete a new industrial waste survey		
Develop mechanism for updating the survey.		
Include local limits for all pollutants in permits.		
Apply new source standards in the Reading Truck Body permit.	New permit issued 10/1/07 applied new source standards.	10/1/07
Apply local limits to contact cooling water discharge from Rohm and Haas.	Contact cooling water has been re-piped to discharge with the other wastestreams and so is now included in the sampling point and covered by the permit limits.	3/31/10


February 8, 2011

Requirement	Status	Completion Date (Estimate)
<b>Control Mechanism</b>		
Require self-monitoring for all local limit pollutants at least twice per year or document determination that there is no reasonable potential for violation.		
Revise permits in accordance with permit review.	Revised draft of standard conditions submitted 4/23/10 with EPA comments sent 2/7/11.	
<b>Compliance Monitoring</b>		
Evaluate appropriateness of single grab sampling.		
Define "as appropriate" for TTO sampling in Reading Truck Body permit.	Revised permit language requires grab samples for volatiles and 8-hour composite for other pollutants.	3/31/10
Ensure that all users monitor all regulated pollutants at the required frequency.	Self-monitoring reports are now routinely checked to ensure that all pollutants are monitored at the appropriate frequency and that the monitoring occurs at the appropriate intervals.	3/31/10
Ensure that 24-hour violation notification from users is obtained and documented.	The City now uses a spreadsheet to track the 24-hour notifications and the submission of the resample results.	3/31/10
Ensure that slug control plans include a description of discharge practices.		
<b>Enforcement</b>		
Enforce in accordance with the ERP.		

Requirement	Status	Completion Date (Estimate)
Data Management & Public Participation		
Establish reliable mechanism for tracking penalty payments.	The City has developed a computer program for tracking penalties.	12/31/2007
Resources		
None		

February 8, 2011



RE: 2009 Annual Report   
John Lovell to: jackie.hendricks

02/08/2011 04:50 PM

Thanks for the quick turnaround. I guess I jumped the gun on Muhlenburg Foods because I did see the explanation in the annual report after I had sent you the message. Sorry about that.

As far as Exide, generally with facilities that have separate management and authorized representatives, and discharge separately, I would suggest that you permit them separately and consider them separate SIUs even if they are owned by the same company - especially since the company seems to deal with them as separate facilities. However, if Plant One and Plant Two have ceased operations and you only have the Recycling Plant remaining, it seems like the best approach would be to issue a single permit to the Recycling Plant. I'd probably consider the other two to be closed unless there is still some kind of discharge. If there is still some kind of discharge from Plant 1 and Plant 2 you could still consider them separate facilities but non-SIUs.

On Crescent Brass, Deb and I exchanged voice messages, but haven't talked yet. So far I haven't heard from the consultant either. I did talk to their consultant a few months ago and basically told him that as long as the company discharges in violation of the limits and the sanitary discharge has significantly higher levels of pollutants than "normal" sanitary, I thought it was appropriate for their to be a permit and the facility to continue to be regulated. My guess is that the employee showers are contributing a significant concentration of pollutants to the system (dust and metal powder being washed off).

Let me know if you'd like to talk more about Exide.

John Lovell  
Pretreatment Coordinator  
EPA Region 3  
1650 Arch Street  
Philadelphia, PA 19103-2029  
215-814-5790  
215-814-2318 (fax - NEW)

The following is from page 2 of the Annual Repo...

02/08/2011 10:44:02 AM

From: <jackie.hendricks@readingpa.org>  
To: John Lovell/R3/USEPA/US@EPA  
Date: 02/08/2011 10:44 AM  
Subject: RE: 2009 Annual Report

The following is from page 2 of the Annual Report:

Muhlenberg Foods shut down production in December 2008 and did not reopen. In 2009, the City was informed that the facility was permanently closed. Subsequently the building was demolished. Its permit expired on June 30, 2009. This company is not included in any of the spreadsheets or the industrial user listing since it was not in operation for any part of the year.

Exide is generally considered one facility due to ownership. However, the plants have separate management and separate authorized representatives for the Pretreatment Program (authorized representatives have been given this authority from the same VP of the company). Self-Monitoring reports are sent by different individuals. Therefore each plant has a separate permit. The plants are physically separated

with separate sampling points but within a single large property complex.

It appears as if the management structure may be changing in 2011 due to the shutdown of operations in Plant One and Two in 2010. If that does go through, I was considering a single permit. Any comments on this? Permits will expire at the end of this year and gives them time to reorganize and the City time to evaluate the new situation. The City will most likely continue to permit at least two of these three plants - if not all three - depending on how the physical reorganization will occur.

On another note, did Deb Hoag ever talk to you yesterday about Crescent Brass? We had a meeting yesterday with the consultant that the company appointed. He most likely will be contacting you if he has not already done so. We have not been successful in getting through to him about the Pretreatment Program. And again, he is not authorized to represent the company within the confines of the Pretreatment Program. Reports for the third quarter were never resubmitted with the signature of the authorized representative as requested in numerous letters from the City. The company therefore is in SNC for Failure to Report for the fourth quarter since these reports for the third quarter are more than 30 days late (due date was October 31st). The reports for the fourth quarter were not submitted at all to date and the City sent two letters concerning this issue. At this point, the reports are not more than 30 days late but I do not expect them to be submitted. This consultant essentially dismisses issues such as SNC, administrative fines and violations. In the appeal he submitted to the City yesterday, he stated that he expects permitting of the facility to cease at the latest with the expiration of the current permit which is September 30, 2011. The City will be meeting with its attorney as the next step.

-----Original Message-----

From: Lovell.John@epamail.epa.gov [mailto:Lovell.John@epamail.epa.gov]  
Sent: Tuesday, February 08, 2011 9:49 AM  
To: Jackie C. Hendricks  
Subject: 2009 Annual Report

I'm finally getting to the 2009 annual report for you guys and have a couple of quick questions.

- Muhlenburg Foods was listed in the 2008 report but not the 2009 report, but the 2009 report doesn't list them as having closed. Are they still discharging and if so are they still considered an SIU?
- For Exide, you seem to list it as a single facility but with 3 locations (that seem like they could be next to each other). They also are listed with separate permit issuance dates (although the permit issuance dates are all the same). Is this considered one facility or three? Do they have separate discharge points? Do they have separate permits, or do they have a single permit?

Thanks.

John Lovell  
Pretreatment Coordinator  
EPA Region 3  
1650 Arch Street

Philadelphia, PA 19103-2029  
215-814-5790  
215-814-2318 (fax - NEW)


 John Lovell/R3/USEPA/US

04/26/2010 11:05 AM

To <jackie.hendricks@readingpa.org>

cc

bcc

Subject RE: 

OK, then we don't need anything else for the publication.

Thanks.

John Lovell  
Pretreatment Coordinator  
EPA Region 3  
1650 Arch Street  
Philadelphia, PA 19103-2029  
215-814-5790  
215-814-2302 (fax)  
<jackie.hendricks@readingpa.org>



<jackie.hendricks@readingpa.org>

04/26/2010 10:44 AM

To John Lovell/R3/USEPA/US@EPA

cc

Subject RE:

The ad in the Annual Report is the complete ad. This ad was published March 21, 2010. What was missing in the first ad was the name of Cloister Car Wash and Lube. The rest of the information was included but the line with the name of the IU was missing. The first publication with the missing name was published on March 14, 2010.

-----Original Message-----

From: Lovell.John@epamail.epa.gov [mailto:Lovell.John@epamail.epa.gov]  
Sent: Friday, April 23, 2010 4:53 PM  
To: Jackie C. Hendricks  
Subject: Re:

For the publication, I see in the annual report that you included a copy of the newspaper publication. Is that the one that is missing the one user, or is that the complete copy? If the copy of the newspaper publication included in the report is not complete (version that was missing the user), then we will need a copy of the revised newspaper notice. In either case, we don't need a copy of the proof of publication to add to the report, although you should keep it for your files.

Let me know if you'd like to discuss.

John Lovell  
Pretreatment Coordinator  
EPA Region 3  
1650 Arch Street  
Philadelphia, PA 19103-2029  
215-814-5790  
215-814-2302 (fax)

<jackie.hendricks@readingpa.org>

04/23/2010 04:20 PM

John Lovell/R3/USEPA/US@EPA

To

cc

Dear John

I am enclosing a copy of the changes I made to the permit as per your June 28, 2006 letter addressing the last EPA audit of the City's Pretreatment Program.

The changed areas are in blue. The green highlights are for my use and indicate areas that are IU specific and have to be changed from permit to permit.

There are other changes in the beginning pages of the permit as well as in the Industrial User Self Monitoring Report Form. These changes are mostly industrial user specific. I will send you a full permit later so you will be able to see the other changes.

The changes I am sending you today are applicable to all permits. The only section that will vary will be on page 5, Section D - Other Permit Conditions. I use this section for additional requirements that are industrial user specific.

For the Annual Report we recently submitted - we always included the Proof of Publication statement from the Reading Eagle. It was not included this year. It arrived after we sent the Annual Report. This is because our ad had to be reprinted on the Sunday following our original submission. The newspaper omitted the name of one of the IUs. They reprinted our full ad free of charge and this delayed the invoice and Proof of Publication statement. Do you want us to send this statement to you to add to the Annual Report?

[attachment "A new permit format with mark ups.doc" deleted by John Lovell/R3/USEPA/US]

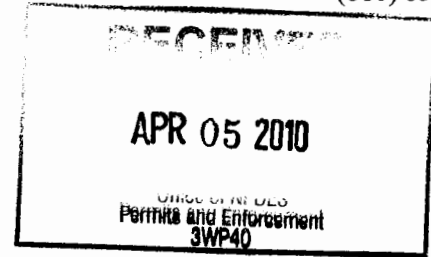




## CITY OF READING, PENNSYLVANIA

UTILITIES DIVISION  
WASTE WATER TREATMENT PLANT  
815 WASHINGTON STREET  
READING, PA 19601-3690  
(610) 655-6258

PUBLIC WORKS  
DEPARTMENT



March 31, 2010

Mr. John Lovell (3WP41)  
Office of Municipal Assistance  
US Environmental Protection Agency  
Region III  
1650 Arch Street  
Philadelphia PA 19103-2029

Dear Mr. Lovell:

As required by the City of Reading's NPDES Permit Number PA0026549, the City is to submit an annual report covering developments of the City's Pretreatment Program. Enclosed please find the annual report covering the period of January 1, 2009 to December 31, 2009.

Please do not hesitate to contact me at 610-655-6258 should you have any questions on the report.

Thank you for your attention.

Sincerely,

A handwritten signature in black ink, appearing to read "Deborah A.S. Hoag".

Deborah A.S. Hoag, PE  
Utilities Division Manager

DH/eh

cc: Charles M. Jones, P.E., Director of Public Works  
Jacqueline C. Hendricks, Environmental Program Coordinator  
File



## PRETREATMENT PERFORMANCE SUMMARY

### I. General Information

Control Authority Name: City of Reading WWTP  
Address: 815 Washington Street  
City : Reading State : PA Zip : 19601-3690  
Contact Person: Deborah A.S. Hoag, P.E.  
Contact Title: Utilities Division Manager  
Contact Telephone Number: (610) 655-6258  
E-mail address: Deborah.Hoag@readingpa.org  
NPDES Nos: PA 0026549  
Permit Issuance Date: 05/01/01 Expiration Date: 05/01/06  
Reporting Period: 1/1/09 to 12/31/09  
Total Categorical IUs (CIUs): 10  
Total "Middle Tier" CIUs (MTCIUs): 0  
Total Nonsignificant CIUs (NSCIUs): 0  
Total Significant Noncategorical IUs (SNIUs): 24

### II. Compliance Monitoring Program

1. No. of SIUs with Current Control Documents.....34
2. No. of SIU Facilities Inspected..... 36
3. No. of SIU Facilities Sampled..... 34
4. No. of SIUs Submitting Self-Monitoring Reports..... 35

### III. Significant Industrial User Compliance

1. No. of SIUs Violating a Compliance Schedule/No. On a Schedule..... 0/0
2. No. of SIUs in SNC for the July to December Period..... 4
3. No. of SIUs in SNC At Any Time During Calendar Year..... 8
4. No. of SIUs in SNC That Were Also in SNC During The Previous  
Calendar Year..... 5
5. No. of NSCIUs that violated any standards or requirements..... N/A

### IV. Enforcement Actions

1. Notices/Letters of Violation Issued to SIUs..... 120
2. Enforcable Compliance Schedules Issued to SIUs..... 0
3. Civil/Criminal Suits Filed..... 0
4. No. of SIUs from which Penalties have been Collected..... 24
5. Other Actions (sewer bans, etc.)..... 0

I certify that the information contained in this report and attachments is complete and accurate to the best of my knowledge. (See Part B.V of the instructions)

Deborah A. S. Hoag, P.E.  
Name of Authorized Representative

  
Signature

Utilities Division Manager  
Title (Print)

03/31/2010  
Date

## **Pretreatment Annual Report**

### **Part A – Pretreatment Performance Summary**

#### **I – General Information**

##### **Significant Users**

At the end of the reporting period, the City of Reading had 34 significant industrial users, classifying 10 as categorical users and 24 as non-categorical users. Last year the City reported 36 significant industrial users of which 9 were categorical users. All 34 of the users have current permits.

The number of categorical users has increased by one. Last year, Summit Steel and Manufacturing was removed from the list and this year it has been returned to the list. Summit Steel and Manufacturing is a new categorical industrial user that began operations in 2006 and received its first permit from the City in that year. It is classified under the Metal Finishing regulations because of a powder coating line. This powder coating line was moved to its present location as part of the company's move from another location in Pennsylvania. A pretreatment system was installed for the discharge from this system. However, the company discontinued the powder coating operation in June 2007 because it was not cost effective. The cleaning tanks and pretreatment system remained in place. Last year the City considered it unlikely that the operation would be put back into service or the permit would be renewed when it expired on September 30, 2009. A permit renewal letter was sent to the company in 2009. In the letter the company was told that their decision to renew the permit should be based on the possibility that the powder coating line would be put back into service. The company was told that if the permit was not renewed, the powder coating line could not be put back into service until the City is notified, a new permit application is filed and a new permit is received. The company decided to maintain a current permit in the event it can identify one or more customers that will make it profitable to begin operation of the line once again. The company feels this is a possibility in 2010. The new permit written for Summit Steel and Manufacturing contains a requirement that the City be notified in advance of plans for the start up of the powder coating line. A facility inspection was conducted in 2009. No testing was conducted in 2009 because there was no industrial discharge from the facility during the year.

Five of the categorical users are classified as Metal Finishing or Electroplating. As such, these CIUs have a limit for total toxic organics in their permits and are required to monitor for TTOs on a semiannual basis. By permit, they may submit a certification statement in lieu of monitoring if they meet the requirements. All current permits for these CIUs specify which pollutants must be collected as grab samples and which pollutants must be collected as composites. The hours for the composite sample are based on the number of shifts and/or the discharge hours of each user. While other industrial users generally do not have a requirement for TTO testing in their permits, this same format is followed if this requirement included. The following is an excerpt from the current permit for Reading Truck Body. The numbers in parenthesis refer to various footnotes. The description for footnote (5) is included. This change was made as a result of the June 28, 2006 letter addressing the last EPA audit of the City's Pretreatment Program.

## PART II - MONITORING REQUIREMENTS

A. From the period of October 1, 2007 to September 30, 2010, the Permittee shall monitor Outfall 001 for the following:

### Measurement

<u>Parameter</u>	<u>Location</u>	<u>Frequency</u>	<u>Sample Type</u>
TTO	(1)	2/Year (6) (8)	Grab for volatiles 8 HC (5) for semi-volatiles

(5) Time proportional, 8 hour composite sample collected during the hours of discharge (between 8 am and 5 pm) with an automatic sampling device capable of collecting at least four (4) samples of equal volume per hour and maintaining sample temperature at 4°.

The number of non-categorical users decreased from 27 to 24. The Hershey Company – Reading Plant discontinued production on February 20, 2009. This was confirmed at an on site visit in March at which time cleanup and equipment removal were in progress. The City was informed by letter on April 13, 2009 that there was no further industrial discharge after April 1, 2009 and the building was vacated. The permit for this company was cancelled and rendered void on May 8, 2009. Power Packaging discontinued production on May 29, 2009. This was confirmed at an on site visit in June 2009. The permit for this company expired on June 30, 2009. Both of these companies are still included in the spreadsheets and industrial user listing for the 2009 Annual Report. Muhlenberg Foods shut down production in December 2008 and did not reopen. In 2009, the City was informed that the facility was permanently closed. Subsequently the building was demolished. Its permit expired on June 30, 2009. This company is not included in any of the spreadsheets or the industrial user listing since it was not in operation for any part of the year.

George Weston Bakeries was sold in 2009. The new ownership decided to do business under the company's former name which is Stroehmann Bakeries. There were no changes to the operations at the facility and no changes in personnel that would affect the Pretreatment Program. The name change from Stroehmann Bakeries to George Weston Bakeries was reported in the 2008 Annual Report.

In the June 28, 2006 letter addressing the last EPA audit of the City's Pretreatment Program, it was stated that Rohm and Haas has a contact cooling waste stream from thermoplastic that is not being regulated by the user's permit. The inspection of this facility was conducted in August 2005. At the time of the visit, the company personnel who handle the Pretreatment Program and are most familiar with the discharge practices of the facility were not present. A relatively recent change had been made to the discharge practices. The thermoplastic extruders are in a building that discharges to a separate outfall. Up to 1996, the City and the company did sample this outfall. Sampling of this outfall was discontinued because there was no evidence to believe that violations would occur and testing for conventional pollutants always yielded low results. Thermoplastics is a minor component of the company's business. The City did however issue new local limits in the year 2000 that were, in many cases, more stringent. After issuance of the new local limits, the facility began to have difficulty in meeting the zinc limit. Working with this company to achieve compliance with the new limit took a number of years and ended with the issuance of a Consent Order and Agreement in 2004. A pretreatment system was installed in

2005 that has been effective in achieving compliance with the zinc limit. Prior to installation of this system and to this day when there is an occasional violation, the company attributes it to zinc in the incoming water. The City sampled the incoming water from August 2004 through April 2005 on a monthly basis and had no result over 0.11 mg/L. The City has been sampling the incoming water monthly since February 2009 with similar results. The company does make a product that uses zinc powder. In 2003, while the zinc violations continued, the City issued a short term permit to Rohm and Haas to include the monitoring of a new outfall created as a result of an addition in the thermoset building. The company did not want to sample additional outfalls and under the supervision of the City's Plumbing Inspector, this new outfall was capped off and the discharge was piped to the sump (Sump G) going to the existing outfall. At approximately the same time, piping for the discharge from the contact cooling water in thermoplastics was installed. This water is on a closed loop system and is discharged as required through this new piping. This discharge also goes to Sump G. The piping was installed between 2003 and 2004. It was first described in the 2004 City inspection report. With the installation of the pretreatment system in 2005, wastewater from Sump G goes through pretreatment prior to discharge to the outfall that is regulated. Rohm and Haas will be issued a new permit in 2010. As already discussed with the company's authorized representative for the Pretreatment Program, the permit will contain a requirement to send in a written statement concerning the new discharge practices for the contact cooling water from thermoplastics.

#### Non-Significant Users

The City also has 15 users classified as non-significant due to their minor flows and/or the low probability of potential problems. This is a decrease from the 16 reported in the last annual report. Kutztown Road Car Wash is no longer in operation. The owner informed the City that the car wash was shut down in August 2009, the company was in bankruptcy and the property was for sale. The For Sale sign was observed by City personnel on a number of occasions. The permit for this company expired on December 31, 2009. This company is still included in the spreadsheets and industrial user listing for the 2009 Annual Report.

Last year, three non-significant users were removed from the list. They are still included in the industrial user listing for information purposes. This is because their permits either expired or were cancelled in 2009. They are not included in any of the spreadsheets because none of them discharged in 2009. All three of these users had permits for groundwater remediation systems. CRL Holdings discontinued its discharge in July 2006. Its permit expired on June 30, 2009. Getty Properties Corporation discontinued its discharge in October 2007. Its permit expired on December 31, 2009. The SICO Company – Turkey Hill #120 discontinued its discharge in April 2008. Its permit was cancelled and rendered void on February 4, 2009.

The current list of industrial users with their addresses is attached as **Appendix 1**.

## II – Compliance Monitoring Program

**Appendix 2** provides a listing with issuance and expiration dates for all significant and non-significant user control documents along with the number of inspections, sampling visits and self-monitoring events required and conducted during the year. The City uses permits for its control mechanism for significant and non-significant users. All 36 significant industrial users who were in business all or part of 2009 had or have current control documents. All permits are individual. No general control mechanisms (permits) are used. For CIUs, the City has not assigned mass based limits in place of concentration based categorical limits. The City has not granted a monitoring waiver for any CIU for any categorically regulated pollutants in accordance with 40 CFR 403.12(e)(2). 36 significant industrial users were inspected during the year. 34 significant industrial users had open permits at the end of 2009. The City requires self-monitoring for all of its significant industrial users. For one industrial user, George Weston Bakeries, the City performs all of the testing for one parameter only. The City performs all testing for color in its own laboratory. The industry is required to do self-monitoring for all other parameters. This decision was based on the results of a split sample study. The City understands that any violation for color in its testing requires a resampling within 30 days in accordance with the Pretreatment Regulations.

34 significant industrial users were sampled by the City during the year. Summit Steel and Manufacturing was not sampled because there was no industrial discharge from the facility in 2009. Evergreen Community Power was not sampled because full operation of the facility will take place in 2010. A number of delays prevented the company from commencing full operation in the first quarter of 2009 as planned. The company was testing and commissioning systems in the spring and summer. During the Fall, the company was still in start up mode and had a number of shut downs in order to perform maintenance and repairs. The company was in limited operation during the month of December and shut down over the holidays. The company performed an unscheduled self-monitoring in the month of December as discussed with the City. The City plans to sample Evergreen Community Power on a quarterly basis in 2010 when it is in full operation. Evergreen Community Power was issued a permit commencing September 1, 2008. Full operation was expected to occur in the first quarter of 2009. Regularly scheduled self-monitoring and City testing is scheduled to begin after full operation. Prior to this, discharges were from construction cleanup, general cleaning, flushing of the systems, hydrostatic testing of piping and equipment and other pre-startup discharges as approved by the City. The discharges were periodic in nature. The City was notified prior to commencement of these discharges associated with the start up procedures as required by the permit. The City reserved the right to sample these discharges. After full operation, discharges will be from boiler blowdown; cooling tower blowdown; backwash, regeneration and cleaning of water treatment systems including reverse osmosis concentrate and general cleaning. The industry is not categorical due to the fact that the process utilizes biofuels as opposed to fossil fuels.

City sampling of significant users varies from monthly to annually. Exide Technologies – Reading Recycling is normally sampled on a quarterly basis by the City. Only one sampling event was conducted in 2009. This was performed in the first quarter. There was a fire in the building in May 2009 resulting in structural damage. The building was taken out of service and therefore there was no discharge. The discharge to the sampling point is

sanitary - not industrial. Employees were directed to facilities and showers in other Exide buildings in the complex. The building was returned to use at the end of November. The locker room is set up only for contractors but the facilities could be used by employees as well. The City will resume sampling in 2010. The Hershey Company – Reading Plant was sampled only in the first quarter of 2009 due to the plant closing in this quarter. Power Packaging was sampled on a monthly basis by the City. It was sampled monthly up to the plant closing. May 29, 2009 was the last day of production.

Significant users are required to submit self-monitoring reports at various frequencies but not less than twice per year. All significant industrial users submitted all required self-monitoring reports during the year. Summit Steel and Manufacturing did not submit self-monitoring reports since it did not discharge industrial waste in 2009. Evergreen Community Power performed an unscheduled self-monitoring in the month of December as discussed with the City. The company was in limited operation during the month of December. It will be in full operation in 2010 and then will begin its regularly scheduled testing. Semiannual reporting is required. Exide Technologies – Reading Recycling normally submits self-monitoring reports on a quarterly basis. Three reports were submitted for the 2009 year. First and second quarter reports were submitted prior to the fire in the building in May 2009. The company also performed sampling and submitted a self-monitoring report for the fourth quarter of the year after the building was returned to use. The Hershey Company – Reading Plant submitted its one required self-monitoring report for the first quarter of 2009 prior to the plant closing. Power Packaging submitted self-monitoring reports for the first two quarters of the year for its required monthly testing. Monthly testing was done up through and including the month of May when the plant closed.

No significant industrial users were cited for Failure to Report. Beginning with the third quarter of 2005, the City is using Late Sampling as a noncompliance category. Late Sampling is applied when the self-monitoring report is received in a timely manner but the testing submitted is performed in a month or time frame other than required by the permit. Two significant industrial users were cited for Failure to Resample. These users and parameters in non-compliance are: Stroehmann Bakeries for oil and grease (HEM) in the second quarter and Termaco USA for oil and grease (SGT-HEM) in the first quarter. Both of the users submitted the required resample and returned to compliance. This is described in Part A. III. These users received administrative penalties and were published as facilities in SNC for Failure to Resample.

In the June 28, 2006 letter addressing the last EPA audit of the City's Pretreatment Program, it was stated that the City must ensure that all users monitor all regulated pollutants at the required frequency. The example cited was Reading Truck Body which did not monitor for SGT-HEM in 2004. By permit Reading Truck Body was to begin monitoring for this pollutant in January 2005. As self-monitoring reports are received, they are checked against the current permit. The reports are checked for completeness of testing as well as sampling in the month or time frame required by the permit. This procedure has been in place for over five years. A Notice of Violation for Failure to Report or Late Sampling (as described in the previous paragraph) is issued depending on whether or not the required testing is submitted within 30 days after the due date of the report. In 2009, Hofmann Industries sampled for all parameters except copper in August as required by its permit. The company performed the sampling in October and

submitted the report less than 30 days after the due date. The company was issued a Notice of Violation for Late Sampling and was assessed a penalty of \$250. This is found in the Enforcement spreadsheet in Appendix 6. The following examples are found in the 2008 Annual Report in the Enforcement spreadsheet. In 2008, Exide Technologies – Reading Recycling sampled for all parameters except lead in February as required by its permit. The company performed the sampling in April and submitted the report less than 30 days after the due date. The company was issued a Notice of Violation for Late Sampling and was assessed a penalty of \$250. In 2008, two non-significant industrial users were issued Notices of Violation for Late Sampling. The self-monitoring testing for Perception and Remcon Plastics did not include all the required parameters in the month stipulated in their permits. The missing tests were submitted less than 30 days after the due date. The penalty amount was \$250 in each case.

In the June 28, 2006 letter addressing the last EPA audit of the City's Pretreatment Program, it was stated that the City must ensure that users provide the 24-hour violation notification and that the City documents this notification in the user's file. Previously the City used a telephone log that was kept in the user's file. This paper system is cumbersome and difficult to track. The City has changed to a spreadsheet that is used to track initial notification. This may be by phone call, e mail or fax and may include the report with the initial violation. This same spreadsheet is used to document receipt of the resample(s) until compliance is achieved and therefore is also used to determine if there was a Failure to Resample and Report within 30 days. This spreadsheet to track user notification and violations is used in addition to another spreadsheet that documents all self-monitoring and City testing performed during the year along with notes on violations and resamples due and determination of significant non-compliance.

During the year, the City conducted sampling in excess of the proposed amount at a number of facilities to assess compliance after violations. A number of facilities conducted self-monitoring above the required amount for the same reason. These events were done at the facility's initiative or voluntarily following the City's request. The Increased Industrial Sampling spreadsheet shows details of this and is included in **Appendix 3**. The number of additional sampling events on this spreadsheet does not always correspond with the Compliance Monitoring spreadsheet in Appendix 2 that covers all sampling events for the year. This is because City sampling events for issues other than compliance are not included in the Increased Industrial Sampling spreadsheet. In some cases, the City or the industry tested for additional parameters during a required or scheduled sampling event. In this case, the additional sampling performed column has been left blank and only the tests are listed. Required industrial resamples following violations are not included on any of the spreadsheets. Separate spreadsheets are included for significant industrial users and non-significant industrial users. The Increased Industrial Sampling spreadsheet also includes a Notes section. In this section, formal changes in sampling frequency are described. These are instances where the industrial user's permit or the City's SOP for an industrial user was changed to increase the frequency of testing for a parameter of concern.

While not required to report on non-significant industrial users, the City has always included this information in the Annual Report. All non-significant industrial users were sampled by the City during the year, except Perception and Ultra Wash of Philadelphia. Perception is scheduled for semiannual sampling by the City. This is a groundwater remediation system. It was only in operation from February 9<sup>th</sup> through April 7<sup>th</sup> in 2009. There is a probability that the system will



not be put back into operation. Ultra Wash of Philadelphia is permitted for possible batch discharge only and therefore monitoring by the City is not planned. City sampling of non-significant users varies from quarterly to annually with the exception of Ultra Wash of Philadelphia.

Non-significant users, with the exception of Kutztown Road Car Wash, are required to submit self-monitoring reports at various frequencies but not less than once a year. Kutztown Road Car Wash had the option of submitting documentation of cleaning their pits and oil separator in lieu of sampling. However, they were sampled by the City. It is currently a close facility on the real estate market. Ultra Wash of Philadelphia is required to report quarterly whether there has been a discharge to the sewer system. All non-significant industrial users submitted all required self-monitoring reports during the year. Getty Petroleum Marketing submitted three self-monitoring reports for the year because this groundwater remediation system was out of service for one full quarter of the year. Perception submitted one self-monitoring report because this groundwater remediation system was in service for only two months of the year.

No non-significant industrial users were cited for Failure to Report. Two non-significant industrial users were cited for Failure to Resample. These users and parameters in non-compliance are: Penske Truck Leasing for zinc in the fourth quarter and Remcon Plastics for copper in the second quarter. Both of the users submitted the required resample and returned to compliance. This is described in Part A. III. These users received administrative penalties and were published as facilities in SNC for Failure to Resample.

### III – Significant Industrial User Compliance

#### List of significant users in SNC anytime in 2009

An explanation of the individual facilities, both significant and non-significant, in SNC during the reporting year follows below. The number of SIUs in SNC at any time during the calendar year was 8. This number is four less than in the 2008 Annual Report and eight less than in the 2007 Annual Report. The number of SIUs in SNC for the July to December Period (fourth quarter) was 4. This is three less than in the 2008 Annual Report. 3 of the 8 SIUs that were in SNC during the calendar year were in SNC for one quarter only. Another SIU that was in SNC during the calendar year incurred the violations during the cleanup phase of the closure of the plant. 4 other SIUs were in SNC for more than one quarter. Three of these companies have already taken measures or are working with engineering firms to solve their non-compliance issues. The City will concentrate efforts with the remaining company in order to solve its non-compliance issues.

The table below summarizes SNC by quarter. The first column shows the number of SIUs in SNC for the quarter. The second column shows the number of SIUs that were also in SNC for the previous quarter. The third column shows the number of new SIUs in SNC (not in SNC in the previous quarter). The fourth column shows the number of SIUs that were in SNC in the previous quarter but were not in SNC for the current quarter (returned to compliance or inconsistent noncompliance).

2009	SNC	SIUs in Repeat SNC	New SIU in SNC	SIUs that Returned to Compliance
1 <sup>st</sup> quarter	7	3	4	4
2 <sup>nd</sup> quarter	5	4	1	3
3 <sup>rd</sup> quarter	3	2	1	3
4 <sup>th</sup> quarter	4	3	1	0

The table below shows the compliance status of the SIUs by quarter for the 2009 year. The number of SIUs in the first column had no violations for the quarter. The number of SIUs in the second column had violations that did not result in SNC. The number of SIUs in the third column had violations resulting in SNC.

2009	Compliance	Inconsistent Noncompliance	SNC
1 <sup>st</sup> quarter	23	7	7
2 <sup>nd</sup> quarter	23	8	5
3 <sup>rd</sup> quarter	24	8	3
4 <sup>th</sup> quarter	16	14	4

These facilities are the *significant users* that were in SNC for the year.

#### Cloister Car Wash and Lube

##### Nature of violation:

1<sup>st</sup> Quarter – TRC violation of the zinc limit listed in its permit

##### Actions planned and current compliance status:

The violations, which occurred in February and March, were traced to the installation of some new equipment that had galvanized bolts. The company returned to compliance in the second quarter and was also in compliance at the end of the year. Later violations in the year, many chronic in nature, were addressed by changing cleaners used for the wheel wash. The company is working to balance its mission of producing a high quality cleaning with continued compliance with its metals limits. The industry is required to sample quarterly for copper and zinc and the City also samples quarterly for these pollutants. In addition, the City performed additional sampling for zinc in 2009 to monitor compliance. Beginning with the first quarter of 2010, the fine for any zinc violation will increase from \$250 to \$500 per occurrence, in accordance with the City's Penalty Escalation Policy.

#### Clover Farms Dairy

##### Nature of violations:

1<sup>st</sup> Quarter – TRC and chronic violation of the oil/grease (HEM) limit listed in its permit

2<sup>nd</sup> Quarter – TRC and chronic violation of the oil/grease (HEM) limit listed in its permit

3<sup>rd</sup> Quarter – TRC and chronic violation of the oil/grease (HEM) limit listed in its permit

4<sup>th</sup> Quarter – TRC and chronic violation of the oil/grease (HEM) limit listed in its permit

##### Actions planned and current compliance status:

2008  
The Consent Agreement with Clover Farms Dairy terminated on July 31, 2008. The agreement was for compliance with the oil and grease and pH limits in its permit. The company hired a consulting firm to work on the compliance issues. At the request of this firm, the agreement was written with two pathways to achieve compliance. These alternatives were equalization and pH adjustment or DAF technology. Each alternative had a separate termination date to achieve compliance. Equalization and pH adjustment was chosen. The final compliance date for this approach was July 31, 2008. This Consent Agreement was signed on December 29, 2006. During the first five months of 2007, additional testing was done by the consultant to look at variations in wastewater characteristics and flow on different days and different times of the day. A number of problems with the testing extended the time of this study to five months. The study was done to look at the effectiveness of segregation of high strength waste streams and equalization of other waste streams. There were also unforeseen problems in obtaining approvals from the local municipality for the location of the tanks. In the second half of 2007, three to four locations were considered and rejected for a variety of reasons. These included lack of approval from the local municipality, the lengthy process involved in obtaining a new easement for one of the sites and inability to purchase land for another site. As choice of a site location was pursued, design plans were completed, modified and approved as needed and the selected construction company continued work on the project.

The construction of this system has not returned the company to compliance for oil and grease. The company is in compliance with its pH limit. It is possible that the original sampling and testing studies were inaccurate. The design plans were based on these studies and have not proven to be adequate to handle the oil and grease loadings. The company continued its effort to

divert additional waste streams to the segregation tank and to investigate methods of achieving compliance with the current system. A number of modifications of the original design were made by the company engineers. Company representatives met with the City in March 2009 to discuss the violations and sampling procedures. They agreed to perform their own oil and grease study on the effluent. This study was performed promptly in the month of March. As a result of the study, the company hired a firm to do a DAF engineering proposal.

Prior to signing the Consent Agreement, the fine schedule was \$1500 per occurrence for an oil and grease violation. For the duration of the Consent Agreement, the fine for any oil and grease violation was set at \$500 per occurrence. Beginning with the first quarter of 2009, the fine for any oil and grease violation was escalated from \$500 to \$1000 per occurrence, in accordance with the City's Penalty Escalation Policy. In the third quarter of 2009, the fine for any oil and grease violation was escalated from \$1000 to \$1500 per occurrence. The fine will be escalated in the first quarter of 2010 to \$2000 per occurrence. The City and the company are testing monthly for oil and grease.

The City will continue close contact with the company to ensure that the DAF project moves forward in a timely manner. At this point in time, in addition to the engineering firm that is working on the building and DAF system, a second firm is working on the land and zoning approvals that will be needed from the township in which the company is located. The company intends to present all the plans to the township at the same time in the hope that it may help to expedite this part of the process so that construction may begin. Township approvals were responsible for some of the delays in the first Consent Agreement. The City has asked the company for a time schedule with milestones for completion of the project and expects to write a Consent Order or Consent Agreement in 2010.

#### Crescent Brass Manufacturing Corporation ✓

##### Nature of violations:

2008 1<sup>st</sup> Quarter – TRC violation of the copper limit listed in its permit

1<sup>st</sup> Quarter – TRC violation of the mercury limit listed in its permit

##### Actions planned and current compliance status:

The company is in SNC for copper and mercury due to one violation for each metal in three sampling events. The copper and mercury violations occurred during the same sampling event which was conducted in March. The company returned to compliance in the next sampling event conducted later in the month of March and remained in compliance in all sampling events conducted for the rest of the year. The City performed additional sampling for metals in 2009 to monitor compliance. The cause of the violations is unknown. Violations are not expected because the company took actions to obtain classification from the City as a zero industrial wastewater discharge facility. The discharge from the facility is domestic wastewater from the employees which includes a shower and locker room and housekeeping sink. Signs are posted at the housekeeping sink prohibiting the discharge of buckets of wash water. This water is collected for off site disposal. It is possible that lapses in procedure could have caused the violations. The company feels that their low discharge flow, which is even lower due to the recession, was the cause of the violations.

#### 2008 Exide Technologies – Reading Recycling ✓

##### Nature of violation:

2<sup>nd</sup> Quarter – TRC violation of the oil and grease (HEM) limit listed in its permit

## TRC - Tech review criteria

For convert ions  
1.4 x limit  
Toxics/metals  
1.2 x limit

Actions planned and current compliance status: SNC status is based on one violation in the year. The violation occurred when the company returned to compliance when it was out of compliance. Normally the City would have required the company to be in compliance, the company would have been in compliance. May resulting in structural damage to the building in November. Self-Monitoring compliance status: violation is unknown. The data for the violations are not available. Exide buildings in the complex.

HEM - hexane extraction method  
SGT - silica gel technique

The Hershey Company - Reading Plant  
Nature of violations:

✓ CLOSED

1<sup>st</sup> Quarter - TRC violation of the copper limit listed in its permit at outfall 8A

2<sup>nd</sup> Quarter - TRC and chronic violation of the copper limit listed in its permit, outfall 8A

Actions planned and current compliance status:

SNC is based on two violations in the first quarter. Both of the copper violations occurred after the plant ceased production and was doing equipment and plant cleanup prior to closing the facility. Since this was a food manufacturing facility, the copper limit allocated to the company was low. The more extensive cleanup could have been responsible for the violations. The company did not return to compliance. The first violation occurred on a scheduled City sampling event. The second violation occurred on an additional sampling event that was initiated after the first violation. Further sampling could not be conducted due to the plant closure.

National/Yorgey's Cleaners

Nature of violations:

1<sup>st</sup> Quarter - TRC and chronic violation of the oil and grease (HEM) limit listed in its permit

1<sup>st</sup> Quarter - TRC and chronic violation of the oil and grease (SGT-HEM) limit listed in its permit

2<sup>nd</sup> Quarter - TRC violation of the oil and grease (HEM) limit listed in its permit

2<sup>nd</sup> Quarter - TRC violation of the oil and grease (SGT-HEM) limit listed in its permit

3<sup>rd</sup> Quarter - Chronic violation of the pH limit listed in its permit

4<sup>th</sup> Quarter - TRC violation of the oil and grease (HEM) limit listed in its permit

4<sup>th</sup> Quarter - TRC violation of the oil and grease (SGT-HEM) limit listed in its permit

Actions planned and current compliance status:

penalties

The company is in SNC for oil and grease for three quarters of the year due to intermittent violations that occurred throughout the year. The company has not provided a specific cause of these violations. Changes in laundering schedules, procedures or client basis may be a factor. This is an industrial laundry. As with other businesses, the recession has impacted this company. The company has not returned to compliance because violations occurred on the last sampling event of the year which was conducted in late December. The violations were for both HEM and SGT-HEM. The City will continue discussions with the company in 2010 to determine future actions that will return the company to compliance. The City samples quarterly for oil and

grease. The company samples on a semiannual basis. This impacts the determination of SNC. The permit will be reopened in 2010 to increase self-monitoring for oil and grease. In addition, the City will look at increasing its sampling schedule. SNC for pH in the third quarter is based on two violations in three sampling events conducted during the second quarter of the year. The cause of the violations is unknown. The company usually does not have compliance issues with pH. The company returned to compliance by the end of the second quarter and remained in compliance for the rest of the year.

#### Stroehmann Bakeries ✓

##### Nature of violations:

- 1<sup>st</sup> Quarter – TRC violation of the oil and grease (HEM) limit listed in its permit at outfall 002
- 2<sup>nd</sup> Quarter – Failure to Resample at outfall 002
- 4<sup>th</sup> Quarter – TRC violation of the zinc limit listed in its permit at outfall 002

##### Actions planned and current compliance status:

Two violations for oil and grease occurred in the first quarter. The company returned to compliance in the second quarter and remained in compliance with its oil and grease limit for the rest of the year. The cause of the violations is unknown.

The company failed to resample and report within 30 days following one of the violations for oil and grease at outfall 002. The required resample was submitted to the City and was in compliance.

The cause of the zinc violations is currently unknown. The company has hired a consultant and will be testing various equipment and discharges to attempt to isolate the problem. The company has not yet returned to compliance because additional testing was not conducted before the end of the year. The City tests quarterly for zinc and will increase testing for zinc in 2010 to monitor compliance. Beginning with the first quarter of 2010, the fine for any zinc violation will increase from \$100 to \$250 per occurrence, in accordance with the City's Penalty Escalation Policy.

#### Termaco USA, Inc. ✓

##### Nature of violations:

- 1<sup>st</sup> Quarter – TRC violation of the oil and grease (SGT-HEM) limit listed in its permit
- 1<sup>st</sup> Quarter – Failure to Resample
- 3<sup>rd</sup> Quarter – TRC and chronic violation of the phenolics limit listed in its permit
- 4<sup>th</sup> Quarter – TRC violation of the phenolics limit listed in its permit

##### Actions planned and current compliance status:

SNC for oil and grease (SGT-HEM) is based on one violation in three sampling events. The company feels that the violation was caused by oil on the purchased steel. The company returned to compliance and remained in compliance with its oil and grease limits for the rest of the year.

The company failed to resample and report within 30 days following the violation for oil and grease (SGT-HEM). The required resample was submitted to the City and was in compliance. SNC for phenolics in the third quarter is based on one violation in one sampling event that was conducted in September. This was not expected to be a pollutant of concern for this company. The cause of the violation was a mechanical problem in the rinse tank that prevented overflow of the rinse water. This resulted in a concentration of pollutants in the tank. The problem was corrected. In order to insure continued compliance, the City increased monitoring for this

pollutant. Three additional tests were conducted in the fourth quarter. The company returned to compliance in the next two sampling events. Another violation occurred in December. The company took corrective action and adjusted the flow rate of the wastewater discharge. The company returned to compliance with its self-monitoring testing in late December which was the last sampling event conducted for the year. The City will continue to perform additional sampling for phenolics to monitor continued compliance. Beginning with the first quarter of 2010, the fine for any phenolics violation will increase from \$100 to \$250 per occurrence, in accordance with the City's Penalty Escalation Policy.

The following facilities are *non-significant users* in SNC for the year.

#### Paragon Optical Company

##### Nature of violation:

4<sup>th</sup> Quarter – TRC violation of the copper limit listed in its permit

##### Actions planned and current compliance status:

The company has not had a metals violation for over three years. The City monitors for metals of concern on a quarterly basis. SNC is based on two violations in four sampling events. The exact cause of the violations is not known but could be lack of sufficient cleanouts of the solids retention sump or changes in production. The company has returned to compliance.

#### Penske Truck Leasing Company

##### Nature of violations:

2<sup>nd</sup> Quarter – TRC and chronic violation of the zinc limit listed in its permit

4<sup>th</sup> Quarter – Failure to Resample

##### Actions planned and current compliance status:

SNC is based on two violations in three sampling events conducted during the first half of the year. One violation was TRC and the other violation was chronic. The second violation was on an additional sampling event scheduled by the City because of the first violation. In both sampling events with zinc violations, the total suspended solids were much higher than usual. The company returned to compliance following these violations but was not in compliance for zinc at the end of the year. The company has an oil separator/solids settling tank. The company reviewed its maintenance procedures and changed vendors for the servicing of the tank toward the end of the year. Beginning in the fourth quarter of 2009, the fine for any zinc violation was increased from \$100 to \$250 per occurrence, in accordance with the City's Penalty Escalation Policy. The City will continue increased sampling in order to monitor compliance. The company failed to resample and report within 30 days following a zinc violation in October. The required resample was submitted to the City and was in compliance.

#### Remcon Plastics

##### Nature of violations:

2<sup>nd</sup> Quarter – Chronic violation of the copper limit listed in its permit

2<sup>nd</sup> Quarter – Failure to Resample

##### Actions planned and current compliance status:

SNC is based on one test conducted during the first half of the year. Copper is not a pollutant of concern for this company. The cause of the violation is unknown. The company returned to

compliance. The company failed to resample and report within 30 days following the violation for copper. The required resample was submitted to the City and was in compliance.

#### Repeat SNC from the Prior Year

Industrial Users that were in SNC for this reporting year that were also in SNC for the previous reporting period are found in **Appendix 4**. This appendix also lists the parameter or reason for the industrial user being in SNC for both years. There are 3 less repeat SIUs than reported in the 2008 Annual Report.

#### Compliance Schedules

There are no significant users on a formal compliance schedule as of the end of 2009. However, a Consent Order or Consent Agreement is planned for Clover Farms Dairy. The City has been in contact with the company throughout the 2009 year to check on their progress. The City plans to await the outcome of the company's meetings with the township for necessary approvals. This should occur in the first quarter of 2010. This will enable the City and the company to create reasonable milestone dates. Township approvals were responsible for some of the delays in the first Consent Agreement.

There are no significant users on compliance schedules that are in writing but are not considered "formal".

#### Newspaper Listing

The significant users in significant non-compliance at any time during the reporting year are found in the newspaper listing attached as **Appendix 5**. The City used the rolling six-month time frame as required by 40 CFR 403.8 (f)(2)(viii) and reported all significant violators on a quarterly basis.



## IV – Enforcement Actions

**Appendix 6** provides a list of the following for both significant and non-significant industrial users:

Notices of violation

Number and nature of violations

Compliance orders

Total penalties assessed in 2009 and the reasons for the penalties

The City issued 120 Notices of Violation for 2009. This is a decrease from the 130 NOV's reported for the 2008 year. This is the lowest number of NOV's issued for a calendar year in over 6 years. It is attributed to the issuance of Consent Agreements in 2006 and 2007 but also working informally but aggressively with other industries having compliance issues in order to seek solutions prior to the necessity of a Consent Agreement. Another major factor is the City's Penalty Escalation Policy. Under this program, the penalty is escalated after two consecutive quarters with one or more violations for the same parameter. The penalty escalates again after two more consecutive quarters with one or more violations for the same parameter. If there is a quarter without a violation, the penalty remains at the same level for the next two quarters. The penalty returns to the base amount after four consecutive quarters without a violation for the parameter in question. Although there are some industries that are still having penalties escalated, others have been able to return to the base amount through continued compliance. The penalty escalation program has also been a positive factor in working with industries to enter into a Consent Agreement. The penalty escalation program has been in effect since 2003.

During the 2009 reporting period, the City did not issue any Administrative Orders (enforceable compliance schedules) to any of the significant industrial users. As discussed in Part A. III – Significant Industrial User Compliance, the City will be taking formal action against Clover Farms Dairy in 2010. It is expected that this will be a Consent Order or Consent Agreement.

All SIUs that had violations were subject to enforcement action by the City. All NOV's issued to SIUs by the City were followed with an administrative penalty during the next billing cycle. The initial penalty schedule is found in **Appendix 6**. A number of facilities have had penalties escalated due to recurring violations for the same parameter which is also detailed therein.

25 significant users were assessed penalties in 2009. Penalties were collected from 24 of the users in 2009. For one of the users, the only penalty in 2009 occurred in the fourth quarter and this payment has not yet been received. Penalties are included in the quarterly industrial waste surcharge bills. The bills for the fourth quarter of 2009 were mailed out in February and March and all payments have not yet been received. Conversely, the City received payments in 2009 for violations occurring and assessed in 2008. There are some minor payment discrepancies requiring additional research with the Finance Department. A report on the penalty payment status for violations occurring during 2009 is included in **Appendix 7**. Please note that Crescent Brass appears periodically throughout the report. They are required to pay \$265.05 monthly for prior years' delinquent fines as a settlement in their bankruptcy. These payments are processed by the Law Department and postings often include multiple months.

In the October 29, 2009 letter addressing the City's 2008 Annual Report, there were three tables for calendar years 2005 through 2007 showing penalties that were potentially unpaid. The City has reviewed the payment status of these penalties. All of these penalties were paid for 2005 and 2006 except for Muhlenberg Foods and ICI Paints. The penalties for 2007 are not listed as paid. The City will continue to check into the payment status of these penalties. It is possible that they were paid but credited to another account. Muhlenberg Foods shut down production in December 2008 and did not reopen. In 2009, the City was informed that the facility was permanently closed. Subsequently the building was demolished. The City will check into whether these penalties can be recovered.

## **Part B – Pretreatment Developments**

### **I – Summary of POTW Operations**

Over the past year, the City has experienced zero process upsets, NPDES permit violations, pass-through events or interferences that could be attributed to industrial waste. The City did not have problems in the collection system that could be attributed to industrial waste.

The ongoing improvements in management, operations and maintenance (MOM) practices during the year continue to make the pump stations and wastewater treatment plant (WWTP) more effective, efficient and reliable.

Following is a list of NPDES excursions not related to industrial waste.

1. There was one (1) filtrate pump station overflow experienced associated with an electrical failure.
2. In May we experienced NPDES compliance problems regarding the summer ammonia limits. Beyond the typical cold weather adjustment, some maintenance activities appear to have adversely impacted the WWTP. We also received a notice of violation from the Pennsylvania Department of Environmental Protection for an ammonia instantaneous maximum exceedance on a sample taken during their inspection that month.
3. During the reporting year, the City wastewater treatment plant experienced three (3) events requiring PaDEP notification. The one event involved a tertiary effluent spill when a portable pump's hose failed and the other two (2) events were digester foam and sludge spills resulting from a digester burping over the wall.

The City is required to perform priority pollutant testing annually. The priority pollutant sampling was conducted for the influent, effluent and biosolids on March 3-4, 2009 along with the quarterly local limits testing. The results of these analyses are included in **Appendix 8**. The Form U biosolids sampling was conducted on March 4, 2009 and September 2, 2009. The City is required to perform local limits testing on the influent, effluent, and biosolids on a quarterly basis per the City's NPDES permit. Weekly mercury testing is performed on plant influent points and the plant effluent. The results of these analyses are included in **Appendix 8**.

For biosolids, monthly 503 analyses were performed in 2009. Monthly fecal coliform testing on biosolids was performed in the City's laboratory and the results are summarized in a table. These are included in **Appendix 8**.

Influent, effluent and biosolids data from the quarterly testing (including the priority pollutants testing) and biosolids data from the Form U and 503 analyses are summarized in two tables for those parameters requested in your letter of October 29, 2009. These are included in **Appendix 8**. Please note that there are only twelve (12) separate samples for biosolids. Quarterly testing and Form U analysis were done on the same sample as the monthly 503 analysis. The averages of the same day sampling are included in the table.

The influent and effluent mercury results in this table are also found on the weekly mercury testing spreadsheet.

Biosolids testing for the year did not show the typical higher level of molybdenum in the warmer months. This could have been the result of a cooler summer. The City identified cooling tower chemicals as an important source of this metal. All permittees are required to test for molybdenum at least once a year, and the City tests for molybdenum as well. The City ensures that permits require testing for this metal in the summer months. No major source of molybdenum has been found at any industrial user. The City has been encouraging the elimination of molybdenum containing cooling tower chemicals among its industrial users, non-industrial users and contributing municipalities. The level of zinc has shown a modest decline in the 2009 year. All metals in the biosolids meet land application concentration limits except for a spike for lead in the month of October. This was followed by higher than usual concentrations in the months of November and December. Influent testing in November showed a higher concentration of lead. The City will pay close attention to this pollutant in 2010 for continued elevations. The City continues to landfill all biosolids from the wastewater treatment plant but would like to be able to consider other disposal options in the future.

No trucked or hauled wastewater or brine waste is accepted at the plant or within the collection system. In 2006, Dietrich's Milk Products began collecting some of its high strength wastewater as part of its program to comply with its oil and grease limit. This is primarily first flushes during equipment cleanup after milk processing. It is transported by Rodney Loeb Septic Service to the Berks County Wastewater Treatment Plant. In 2008, Clover Farms Dairy also began collecting some of its high strength wastewater to control oil and grease discharges. It is transported by Bailey's Septic Service to the Berks County Wastewater Treatment Plant. Documentation on individual waste streams that are collected for off site disposal (i.e. hazardous waste, used oil, sludges) by industrial users is reviewed during facility inspections.

## **II – Pretreatment Program Changes**

During 2009, there were no changes in the legal authority.

The City continues to use both the PreWin commercial software program as well as a custom spreadsheet developed by the Environmental Program Coordinator for tracking compliance. This system of checks and balances ensures that all deadlines, milestones, notices of violation, and significant non-compliance will be accurately reflected and reported.

The WWTP laboratory, which performs conventional analyses for the wastewater treatment plant and industries, received accreditation in January 2008 under Pennsylvania's Chapter 252, Environmental Laboratory Accreditation. The laboratory has maintained its accreditation since that time. A renewal application was submitted in December 2009. Accreditation has been renewed through January 31, 2011. This latest renewal includes that addition of the following parameters to the scope of accreditation in

2010: TDS, TS, BOD and distillation for ammonia as nitrogen. This is in addition to the following conventional pollutants: ammonia as nitrogen, cBOD, TSS and fecal coliform. In November 2009, the City's WWTP laboratory received the Eastern PA Water Pollution Control Operators Association' Award for Laboratory Excellence for a laboratory with two or more personnel.

In 2009, one of the laboratory technicians took another position with the City. Recruitment was conducted promptly and a replacement was hired. This replacement was the second person hired for the laboratory that had commercial laboratory experience in environmental testing. This new hire subsequently took a position at another POTW. The position was then promptly filled internally by one of the PA DEP certified WWTP operators. This provides additional dimension to the laboratory team because of her experience in plant operations. The laboratory is staffed with five laboratory technicians and a laboratory supervisor. One laboratory technician is the primary person performing the industrial sampling. However, the job duties of all of the laboratory technicians include industrial sampling. The other laboratory technicians are cross trained to perform industrial sampling so they are familiar with all of the industrial sites and the sampling points.

### **III – Miscellaneous Developments**

During March 2003, legal counsel for the City was requested by the United States Department of Justice to meet concerning permit violations of the wastewater treatment plant. As a result of this meeting, the City of Reading has been working with the United States Department of Justice, United States Environmental Protection Agency, and Pennsylvania Department of Environmental Protection in order to address past permit violations and to obtain consistent permit compliance for the future. This Consent Decree addresses the wastewater treatment plant, collections system, and industrial pretreatment program. The negotiations for this Consent Decree were completed and the decree executed by all parties in 2004. On December 9, 2004, the US Attorney announced that an agreement had been reached between the parties, and the complaint and decree were lodged with the judge simultaneously. This was subsequently advertised for a thirty-day public comment period which continued into 2005. The Consent Decree was officially signed by the judge and entered on November 7, 2005. This Consent Decree dictates many interim improvements and systems to be implemented while the City embarks on studies of both the WWTP and collection system prior to beginning a capital improvement plan.

For the Consent Decree interim remedial measures, there is the ongoing implementation and refinement of the Environmental Management System, Wet Weather Operations Plan, and the Operations and Maintenance Plan. Additionally, the Plant Influent, Trickling Filter Performance, and Process Control Monitoring are continuing as described in their respective submissions as required.

With the long-term remedial measures for the WWTP upgrades, this includes the liquid and solid treatment alternatives required by the Consent Decree and common facilities

not required but necessary for functionality including headworks, clarification, and disinfection. The City has both a design engineering firm and a team performing both project management and construction management (PM/CM). City Council awarded the design contract to Black & Veatch (B&V) on March 24, 2008. The final contract was executed on June 23, 2008 with a retroactive effective date of March 25, 2008. City Council awarded the PM/CM contract to the team of Hill International/Weston Solutions/Hazen and Sawyer (HWH&S) on September 8, 2008. The final contract was executed on November 11, 2008 with a retroactive effective date of September 9, 2008.

The WWTP progress in 2008 began with evaluating and finalizing the recommendations from the value engineering (VE) process that would be incorporated into the final WWTP design. Through the VE process, the need for improvements to the conveyance from 6<sup>th</sup> and Canal Street PS area become evident in order to achieve hydraulic efficiency for the WWTP and to address the existing vulnerability. The existing outfall and the need for additional capacity were another topic coming out of VE that resulted in increasing costs to increase value. During 2009, numerous technical memorandums as well as Level One (30%) and Level Two (60%) design documents were submitted and reviewed. The design documents included engineering drawings, specifications, and equipment literature as appropriate for each submission.

In follow-up to another VE recommendation, WWTP upgrades team members from the City, designer, and PM/CM met with the Consent Decree parties on May 26, 2009. The City requested the ability to have the regulators re-consider the biosolids handling alternatives and selection based upon changes in the regulatory, environmental, and economic climate in the past few years.

With the assistance of City sewer team personnel, a contractor began field data collection in July, 2006. This physical field inventory of the sanitary sewer collection system attributes is to develop a geographic information system (GIS) layer as an accurate system map for tracking work completed by internal crews as well as contractors. Additionally, this data will be used by B&V to perform flow modeling of the collection system and determine problem areas from a capacity perspective. The initial phase for is the sanitary interceptors and force mains with phase two being the remaining sanitary structures and phase three being the storm structures. The GIS mapping follows each phase's data collection with submission to the City for review and approval. Following schedule and data quality issues with original contractor, the City's legal counsel was able to reach an amenable agreement on March 31, 2009 which requires the City to begin fresh and not rely on any data in our possession. The City discussed the impact of this contract on the Consent Decree deadlines in the May 26, 2009 meeting with the US DoJ, US EPA, and PA DEP. Following an expedited RFQ/RFP review process for interview and selection, City Council awarded a GPS data collection contract on August 24, 2009. A project kickoff meeting was conducted December 1, 2009 to allow for the database structure and setup to occur in advance of the contract execution while the contract details are being negotiated. Another firm worked toward the implementation of a computerized maintenance management system (CMMS). This will use the geodatabase to track preventive maintenance, response, and repair locations for the collection system

within the GIS. Upon resolving network communication speed challenges, this system will debut with the WWTP staff to debug the work order aspects as they are already accustomed to the use of a CMMS. This will also be incorporated into the new WWTP design as well.

The City has continued to survey the collection system and identify and eliminate as many sources of storm water and ground water to the sanitary sewers as possible. With the GIS field survey, many interceptors were investigated to determine true flow direction compared to the existing mapping and buried manholes were located and raised as well. The City advertised for and received proposals for smoke testing as part of the continuing sanitary sewer system investigation. City Council awarded this contract on September 22, 2008 with the contract negotiation following. The smoke testing as well as other field investigative work is weather dependent. Smoke testing started with a kickoff meeting on August 6, 2009 and field work beginning August 24, 2009. A measured total of 625,142 lineal feet were smoke tested by the end of 2009 of the 715,546 lineal feet anticipated in the subareas being investigated for inflow. Since that has been completed, there are various types of follow-up tasks to be completed by both the City and the contractor including: manhole verification for missing and additional manhole locations, dyed water tracing for suspected sources, and data compilation and organization for final reporting.

During inspections of industrial users, the City has been checking on requisite industrial storm water permits and any possible cross connections between the storm and sanitary sewer systems. In renewing permits with industrial users, the City has continued to require users to remove any storm water that may be entering the treatment plant. These flows may be diverted to storm sewers on a case-by-case basis depending on their availability.

The City is required by the Consent Decree to have certified operators on all shifts. The City chose to incorporate Shift Supervisors as the certified operators responsible and in charge on each shift. There are six Shift Supervisors. Four Shift Supervisors cover the rotation required for continual coverage and report directly to the Operations Supervisor. One is responsible for operational maintenance and one performs in an administrative role including safety. Since November 2006, Shift Supervisors have provided the oversight for operations and personnel 24 hours a day and 7 days a week. Between managers and supervisors responsible for the WWTP and/or collection system, there are fifteen (15) supervisory personnel with the appropriate PA DEP operator certification.

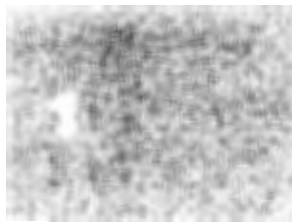
In the AFSCME contract for rank and file employees, operator certification for key operational positions is included. Obtaining operator certification is one of the many goals in improving performance at the plant. There was a continued increase in the number of PA DEP certified operators during the 2009 year. At the WWTP, there are now eight (8) rank and file employees certified for wastewater treatment and collection system plus two (2) employee certified for collection system only in the process of obtaining wastewater treatment certification. There are several other WWTP personnel

in the process of obtaining operator certification having attempted and passed some but not all of the modules required for the City's WWTP. On the Sewer team, there is one (1) rank and file employee certified for the collection system. Since continuing education credits are needed to maintain certification, emphasis is continuing on training opportunities for employees at all levels.

In 2009, the City made additional progress toward the construction of a combined laboratory, administration, and sewers building to be located on property adjacent to the WWTP but separated by a water body. The City intends to construct a LEED-certified, 'green' building and an access bridge across the Mifflin Arm of the Schuylkill River to the WWTP. On February 23, 2009, City Council awarded civil engineering and architectural services contracts. The construction manager used for other City building projects has been retained for this project as well. A LEED charrette was conducted shortly after project kickoff in the project. The project has since been separated into phases with the building as phase one and the bridge connecting to the WWTP as phase two to expedite the PC review and approval. Conditional final plan approval for phase one was received at the September 14, 2009 Cumru Township Planning Commission meeting with the Township Commissioners approving the project at their next meeting. An informal VE was conducted in anticipation of finalizing plans and specifications. Requisite permitting is being finalized so the plans can be recorded. Demolition plan and specifications were finalized to raze the existing structures on the properties and salvage some materials for reuse. This contract was awarded and is in the process of being executed prior to demolition beginning.

The City solicited proposals from legal firms to assist in the evaluation of the existing Intermunicipal agreements (IMAs) and the renegotiation of new IMAs. Proposals were received on May 27, 2009 with review, interviews, and selection expedited prior to the June 8, 2009 Council award of contract. The legal firm has reviewed the City's existing IMAs and other wastewater IMAs, met with the City's committee, drafted revised and reorganized IMAs for review, and met informally with larger bulk municipal customers. The new IMAs will shortly be presented to the municipalities to begin discussions. The new IMAs as being proposed contain more stringent requirements for reporting to the City with changes that may impact the non-residential nature of the wastewater received at the WWTP.





**Appendix 1**  
**Current Industrial Users**

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**Appendix 2**  
**Compliance Monitoring Program**

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**Appendix 3**  
**Increased Industrial Sampling**

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**Appendix 4**  
**Facilities in SNC for 2009 that were  
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**Appendix 5**  
**Newspaper Listing of Significant  
Violators**

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**Appendix 6**  
**Enforcement Actions**

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**Appendix 7**  
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**Appendix 8**  
**2009 Weekly Mercury Testing at Plant Influent  
Points and Plant Effluent**  
**Monthly 503 Analysis for Plant Biosolids**  
**Annual Priority Pollutant Scans on Plant Influent,  
Effluent, and Biosolids**  
**Quarterly Influent, Effluent, and Biosolids Sampling**

**APPENDIX 1**

**CURRENT INDUSTRIAL USERS**

**SIGNIFICANT INDUSTRIAL USERS 2009**  
**CATEGORICAL INDUSTRIES (10)**

Carpenter Technology Corporation - Iron and Steel  
101 West Bern Street  
Reading PA 19601

Mailing Address:  
P O Box 14662  
Reading PA 19612-4662

Crescent Brass Manufacturing-Metal Molding & Casting  
- Zero Discharge  
701 Park Avenue  
Reading PA 19611

Mailing Address:  
Same

Hofmann Industries - Metal Finishing  
3145 Shillington Road  
Sinking Spring PA 19608

Mailing Address:  
Same

Reading Plating and Polishing Works - Electroplating  
1833 Cotton Street  
Reading PA 19606

Mailing Address:  
1839 Cotton Street  
Reading PA 19606

Reading Truck Body - Metal Finishing  
Hanover Blvd & Gerry Street  
Reading PA 19611

Mailing Address:  
P O Box 650  
Shillington PA 19607

Sealed Air Corporation - Pulp and Paper  
450 Riverfront Drive  
Reading PA 19602

Mailing Address:  
Same

Summit Steel and Manufacturing - Metal Finishing\*  
1005 Patriot Parkway  
Reading PA 19605

Mailing Address:  
P O Box 14295  
Reading PA 19612

Termaco USA - Metal Finishing  
171 Tuckerton Road  
Reading PA 19605

Mailing Address:  
Same

United Corrstack - Pulp and Paper  
720 Laurel Street  
Reading PA 19602

Mailing Address:  
Same

Yuasa Inc - Battery Manufacturing  
2901 Montrose Ave  
Laureldale PA 19605

Mailing Address:  
Same

\*Permit was renewed in 2009. No discharge since June 2007.

**SIGNIFICANT INDUSTRIAL USERS 2009**  
**NON-CATEGORICAL INDUSTRIES (24)**

Aramark Uniform Services  
424 Blair Avenue  
Reading PA 19601

Mailing Address:  
P O Box 15166  
Reading PA 19612-5166

The Bachman Company  
51 Spring Valley Road  
Reading PA 19605

Mailing Address:  
P O Box 15053  
Reading PA 19612-5053

Berks Packing Company  
307-323 Bingaman Street  
Reading PA 19602

Mailing Address:  
P O Box 5919  
Reading PA 19610-5919

Cloister Car Wash and Lube  
1 Cloister Court  
Sinking Spring PA 19608

Mailing Address:  
814 Dawn Avenue  
Ephrata PA 17522

Clover Farms Dairy  
3300 Pottsville Pike  
Reading PA 19605

Mailing Address:  
P O Box 14627  
Reading PA 19612-4627

Cryovac, Inc.  
Food Packaging Division  
177 Tuckerton Road  
Reading PA 19605

Mailing Address:  
P O Box 295  
Reading PA 19603

Dietrich's Milk Products  
100 McKinley Avenue  
Reading PA 19605

Mailing Address:  
Same

Evergreen Community Power  
800 South Street  
Reading PA 19602

Mailing Address:  
Same

Exide Technologies  
Plant One  
Spring Valley Road & Nolan Street  
Laureldale PA 19605  
Plant Two  
Spring Valley Road & Montrose Avenue  
Laureldale PA 19605  
Reading Recycling  
Spring Valley Road & Nolan Street  
Reading PA 19605

Mailing Address:  
P O Box 13995  
Reading PA 19612-3995  
Mailing Address:  
P O Box 13995  
Reading PA 19612-3995  
Mailing Address:  
P O Box 14294  
Reading PA 19612-4294

IFS Industries Inc.  
400 Orrton Avenue  
Reading PA 19611

Mailing Address:  
P O Box 1053  
Reading PA 19603

Interstate Container LLC.  
100 Grace Street  
Reading PA 19611

Mailing Address:  
Same

Lentz Milling  
2045 N 11th Street  
Reading PA 19604

Mailing Address:  
P O Box 13159  
Reading PA 19612

National/Yorgey's Cleaners  
1700 Fairview Street  
Reading PA 19606

Mailing Address:  
Same

Prizer Works  
600 Arlington Street  
Reading PA 19611

Mailing Address:  
P O Box 1053  
Reading PA 19603

Quadrant EPP USA, Inc.  
2120 Fairmont Avenue  
Reading PA 19605

Mailing Address:  
P O Box 14235  
Reading PA 19612-4235

Quaker Maid Meats  
520 & 521 Carroll Street  
650 Morgantown Road  
Reading PA 19611

Mailing Address:  
P O Box 350  
Shillington PA 19607-0350

Reading Eagle  
345 Penn Street  
Reading PA 19601

Mailing Address:  
P O Box 582  
Reading PA 19603

Reitech Corporation  
3146 Marion Street  
Laureldale PA 19605

Mailing Address:  
Same

Rohm and Haas Chemicals  
dba Rohm and Haas Powder Coatings  
150 Columbia Avenue  
Reading PA 19601

Mailing Address:  
Same

St Joseph Medical Center-Downtown  
145 N 6th Street  
Reading PA 19601

Mailing Address:  
P O Box 316  
Reading PA 19603

Stroehmann Bakeries  
640 Park Avenue  
Reading PA 19611

Mailing Address:  
Same

Sun Rich Fresh Foods  
425 Gateway Drive  
Reading PA 19601

Mailing Address:  
Same

Sweet Street Desserts  
722 Hiester's Lane  
Reading PA 19605

Mailing Address:  
P O Box 15127  
Reading PA 19612-5127

Tom Sturgis Pretzels  
2267 Lancaster Pike  
Reading PA 19607

Mailing Address:  
Same

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Hershey Company – Reading Plant\*  
200 N 8th Street  
Reading PA 19601

Mailing Address:  
P O Box 15087  
Reading PA 19612-5087

Power Packaging\*\*  
1055 Crossroads Blvd  
Reading PA 19605

Mailing Address:  
Same

\* Production ceased on February 20, 2009. Permit cancelled on May 8, 2009.

\*\* Production ceased on May 29, 2009. Permit expired on June 30, 2009.

## 2009 NON-SIGNIFICANT INDUSTRIES (15)

Air Liquide  
2500 N 11th Street  
Reading PA 19605

Mailing Address:  
P O Box 13577  
Reading PA 19612-3577

Diesel Service, Inc.  
150 Lehigh Street  
Reading PA 19601

Mailing Address:  
Same

Getty Petroleum Marketing, Inc.  
839 Fern Avenue  
Kenhorst PA 19611

Mailing Address:  
c/o Tyree Company  
2702 Cindel Drive Suite 7  
Cinnaminson NJ 08077

Neversink Brewery  
545 Canal Street  
Reading PA 19602

Mailing Address:  
PO Box 817  
Reading PA 19603

NGK Metals Corporation  
150 Tuckerton Road  
Temple PA 19560

Mailing Address:  
917 US Highway 11 South  
Sweetwater TN 37874

Paragon Optical  
644-658 S 7th Street  
Reading PA 19602

Mailing Address:  
658 S 7th Street  
Reading PA 19602

Pennsylvania Truck Centers  
4226 Pottsville Pike  
Reading PA 19605

Mailing Address:  
P O Box 13337  
Reading PA 19612-3337

Penske Truck Leasing  
255 Penske Plaza  
Reading PA 19602

Mailing Address:  
P O Box 7635  
Reading PA 19603-7635

Perception  
110 Revere Blvd  
Reading PA 19609

Mailing Address:  
c/o MEA Inc.  
1365 Ackermanville Road  
Bangor PA 18013

Remcon Plastics  
208 Chestnut Street  
Reading PA 19602

Mailing Address:  
Same

Rohm & Haas Chemicals LLC-R&D Lab  
3 Commerce Drive  
Reading PA 19607

Mailing Address:  
Same

Ultra Wash of Philadelphia  
1619 N 9<sup>th</sup> Street  
Reading PA 19604

Mailing Address:  
P O Box 1130  
North Cape May NJ 08204

Unique Pretzel Bakery  
215 E. Bellevue Avenue  
Reading PA 19605

Mailing Address:  
Same

Van Bennett Food Company  
101 N Carroll Street  
Reading PA 19611

Mailing Address:  
Same

WORLD electronics  
3000 Kutztown Road  
Reading PA 19605

Mailing Address:  
Same

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CRL Holdings\*  
1501 N 9<sup>th</sup> Street  
Reading PA 19604

Mailing Address:  
c/o Earth Tech, Inc.  
2 Market Plaza Way  
Mechanicsburg PA 17055

Getty Properties Corporation\*\*  
300 Morgantown Road  
Reading PA 19611

Mailing Address:  
c/o Tyree Organization  
2702 Cindel Drive Suite 7  
Cinnaminson NJ 08077

Kutztown Road Car Wash\*\*\*  
1841-53 Kutztown Road  
Reading PA 19604

Mailing Address:  
P O Box 147  
Pottstown PA 19464-0147

The SICO Company - Turkey Hill #120\*\*\*\*  
501 Spring Street  
Reading PA 19601

Mailing Address:  
c/o Onesky Engineering Inc.  
444 Creamery Way, Suite 300  
Exton PA 19341

\* No discharge since July 2006. Permit expired on June 30, 2009.

\*\*No discharge since October 2007. Permit expired on December 31, 2009.

\*\*\* Facility closed in August 2009. Permit expired on December 31, 2009.

\*\*\*\*No discharge since April 2008. Permit cancelled on February 4, 2009.



## **APPENDIX 2**

### **COMPLIANCE MONITORING PROGRAM**

## 2009 COMPLIANCE MONITORING PROGRAM

### Significant Industrial Users

Industry Name	Control Document		Inspection and Sampling Frequency					
			Inspections		Sampling Visits		Self-Monitoring	
	Issuance Date	Expiration Date	Performed	Proposed	Performed	Proposed	Performed	Required
Aramark Uniform Services	July 1, 2007	June 30, 2010	1	1	4	4	13	12
The Bachman Company	January 1, 2009	December 31, 2011	1	1	4	4	4	4
Berks Packing Company	January 1, 2010	December 31, 2012	1	1	5	4	13	12
Carpenter Technology	October 1, 2009	September 30, 2012	1	1	4	4	4	4
Cloister Car Wash and Lube	July 1, 2009	June 30, 2012	1	1	6	4	4	4
Clover Farms Dairy	October 1, 2009	September 30, 2012	1	1	15	12	12	12
Crescent Brass Manufacturing	October 1, 2008	September 30, 2011	1	1	4	1	2	2
Cryovac Food Packaging Division	April 1, 2007	March 31, 2010	1	1	4	2	2	2
Dietrich's Milk Products	April 1, 2008	March 31, 2011	1	1	13	12	12	12
Evergreen Community Power	September 1, 2008	September 30, 2011	1	1	0 OK 0	0	1	1 OK
Exide Technologies - Plant One	January 1, 2009	December 31, 2011	1	1	4	4	4	4
Plant Two	January 1, 2009	December 31, 2011	1	1	4	4	2	2
Reading Recycling	January 1, 2009	December 31, 2011	1	1	1	1	3	3
Hershey Company - Reading Plant <i>Closed</i>	April 1, 2008	May 8, 2009	1	1	2	1	1	1 OK
Hofmann Industries	April 1, 2009	March 31, 2012	1	1	2	2	10	4
IFS Industries (International Foundry Supply)	October 1, 2008	September 30, 2011	1	1	14	12	12	12
Interstate Container	October 1, 2007	September 30, 2010	1	1	5	4	4	4
Lentz Milling	July 1, 2007	June 30, 2010	1	1	2	2	4	4
National/Yorgey's Cleaners	January 1, 2009	December 31, 2011	1	1	5	4	2	2
Power Packaging <i>Closed</i>	July 1, 2006	June 30, 2009	1	1	5	5	5	5
Prizer Works	July 1, 2008	June 30, 2011	1	1	4	4	4	4
Quadrant EEP USA	April 1, 2009	March 31, 2012	1	1	1	1	2	2
Quaker Maid Meats	October 1, 2009	September 30, 2012	1	1	4	4	10	10
Reading Eagle Company	August 1, 2009	December 31, 2011	1	1	4	3	5	3
Reading Plating & Polishing Works	July 1, 2008	June 30, 2011	1	1	4	4	6	4
Reading Truck Body	October 1, 2007	September 30, 2010	1	1	5	4	12	12
Reitech Corporation	October 1, 2007	September 30, 2010	1	1	2	2	2	2
Rohm and Haas Powder Coatings	April 1, 2009	March 31, 2010	1	1	12	12	12	12
Sealed Air Corporation	January 1, 2010	December 31, 2012	1	1	14	12	53	52
St Joseph Medical Center Downtown	April 1, 2007	March 31, 2010	1	1	4	4	12	12
Stroehmann Bakeries	July 1, 2008	June 30, 2011	1	1	6	4	3	2

## 2009 COMPLIANCE MONITORING PROGRAM

### Significant Industrial Users

Industry Name	Control Document		Inspection and Sampling Frequency					
			Inspections		Sampling Visits		Self-Monitoring	
	Issuance Date	Expiration Date	Performed	Proposed	Performed	Proposed	Performed	Required
Summit Steel and Manufacturing	October 1, 2009	September 30, 2012	1	1	0	0	0	0
Sun Rich Fresh Foods	October 1, 2008	December 31, 2010	1	1	12	12	10	10
Sweet Street Desserts	April 1, 2009	March 31, 2012	1	1	5	4	4	4
Termaco USA	July 1, 2009	June 30, 2010	1	1	8	2	4	4
Tom Sturgis Pretzels	January 1, 2009	December 31, 2011	1	1	5	4	4	4
United Corrstack	October 1, 2007	September 30, 2010	1	1	14	12	12	12
Yuasa Battery	April 1, 2009	March 31, 2012	1	1	4	4	4	4
<b>Total</b>			<b>38</b>	<b>38</b>	<b>211</b>	<b>178</b>	<b>273</b>	<b>259</b>

**NOTES:**

**Hershey Company - Reading Plant:** The company discontinued production on February 20, 2009. There was no further industrial discharge after April 1, 2009. The permit for this company was cancelled and rendered void on May 8, 2009.

**Power Packaging:** The company discontinued production on May 29, 2009. The permit for this company expired on June 30, 2009.

## 2009 COMPLIANCE MONITORING PROGRAM

### Non-Significant Industrial Users

Industry Name	Control Document		Inspection and Sampling Frequency					
	Issuance Date	Expiration Date	Inspections		Sampling Visits		Self-Monitoring	
			Performed	Proposed	Performed	Proposed	Performed	Required
Air Liquide	July 1, 2009	June 30, 2012	0	0	1	1	2	2
Diesel Service	October 1, 2008	September 30, 2011	0	0	4	4	2	2
Getty Petroleum Marketing	October 1, 2008	September 30, 2011	0	0	2	2	3	3
Kutztown Road Car Wash	January 1, 2007	December 31, 2009	0	0	1	1	0	0
Neversink Brewery	July 1, 2008	June 30, 2011	0	0	2	2	2	2
NGK Metals Corporation	April 1, 2009	March 31, 2012	0	0	4	4	3	3
Paragon Optical	January 1, 2010	December 31, 2012	0	0	5	4	2	2
Pennsylvania Truck Centers	October 1, 2008	September 30, 2011	0	0	4	4	2	2
Penske Truck Leasing	January 1, 2009	December 31, 2011	0	0	7	4	4	4
Perception	October 1, 2008	September 30, 2011	0	0	0	0	1	1
Remcon Plastics	April 1, 2008	March 31, 2011	0	0	2	1	1	1
Rohm & Haas Chemicals LLC - R&D Lab	July 1, 2009	June 30, 2012	0	0	2	1	1	1
Ultra Wash of Philadelphia	November 1, 2007	March 31, 2010	0	0	0	0	4	4
Unique Pretzel Bakery	October 1, 2009	September 30, 2012	0	0	2	2	2	2
Van Bennett Food Company	October 1, 2009	September 30, 2012	0	0	2	2	4	4
WORLD electronics	January 1, 2008	December 31, 2010	0	0	5	2	4	2
<b>Total</b>			<b>0</b>	<b>0</b>	<b>43</b>	<b>34</b>	<b>37</b>	<b>35</b>

**NOTES:**

**Kutztown Road Car Wash:** The company discontinued operation in August 2009. The permit for this company expired on December 31, 2009.

## **APPENDIX 3**

### **INCREASED INDUSTRIAL SAMPLING**

## INCREASED INDUSTRIAL SAMPLING FOR 2009

INDUSTRY (SIU)	Additional City Sampling Performed	Parameters Tested	Number of Extra Tests	Additional Self Monitoring Sampling Performed	Parameters Tested	Number of Extra Tests
Aramark Uniform Services				1	oil/grease (HEM,SGT-HEM)	1
The Bachman Company						
Berks Packing Company				1	oil/grease (HEM)	1
Carpenter Technology						
Cloister Car Wash and Lube	2	zinc	2			
Clover Farms Dairy	2	oil/grease	2			
Crescent Brass Manufacturing	2	copper, lead, mercury, zinc	2			
		copper, lead, mercury	1			
Cryovac Food Packaging Division	2	copper	2			
Dietrich's Milk Products						
Evergreen Community Power						
Exide - Plant One						
- Plant Two						
- Reading Recycling						
Hershey Company - outfall 8A	1	copper	1			
Hofmann Industries				6	chromium, zinc	6
IFS Industries	2	zinc	2			
Interstate Container	1	color	1			
Lentz Milling						
National/Yorgey's Cleaners	1	pH, oil/grease (HEM,SGT-HEM)	1			
Power Packaging						
Prizer Works						
Quadrant EPP USA						
Quaker Maid Meats outfall 003		oil/grease	3			
outfall 004		oil/grease	2			
Reading Eagle Company	1	phenols	1	2	phenols	2
Reading Plating & Polishing Works				2	nickel	2
Reading Truck Body		zinc	1			
Reitech Corporation						
Rohm and Haas Powder Coatings						
Sealed Air Corporation						
St Joseph Downtown-outfall 005						

## INCREASED INDUSTRIAL SAMPLING FOR 2009

INDUSTRY (SIU)	Additional City Sampling Performed	Parameters Tested	Number of Extra Tests	Additional Self Monitoring Sampling Performed	Parameters Tested	Number of Extra Tests
Stroehmann Bakeries 001	1	oil/grease	1	1	copper	1
002	1	oil/grease	1			
002		zinc	1			
Summit Steel and Manufacturing						
Sun Rich Fresh Foods						
Sweet Street Desserts	1	oil/grease	1			
Termaco USA	2	VOC	2			
	1	oil/grease (HEM,SGT-HEM)	1			
	3	phenolics	3			
Tom Sturgis Pretzels						
United Corrstack					oil/grease (HEM,SGT-HEM)	8
Yuasa Battery						

### NOTES:

#### Clover Farms Dairy

A 3 year permit, effective October 1, 2009, was issued. The permit added the requirement for daily pH monitoring including the minimum, maximum and duration of any excursions for each day, effective November 1, 2009. The company now has the ability to retrieve this data from their computer system. In the previous permit, the company was required to take a pH daily from the pH recorder.

#### Hofmann Industries

The hexchrome limit that was part of a previous Consent Agreement with the City was added to the new permit issued, effective April 1, 2009.

#### Reading Eagle Company

A 29 month permit, effective August 1, 2009, was issued. This time period returns the company to its three year cycle. Previously a 7 month permit was issued to cover the time during which construction in the building addition, new equipment installation and equipment relocations were completed. The permit added a new outfall (002) for the building addition while retaining the original outfall which will still have process discharge. The permit contains a prohibition against the discharge of wastewater from press dampening to outfall 002 because it would contain ink and oil and grease. The permit also includes annual testing for VOCs at outfall 002. The SOP for City sampling at outfall 002 was written to include semiannual testing for VOCs. The permit stipulates that testing at the original outfall (001) is to be done when the pretreatment system is in operation. Due to the moving of most of the operations to the building addition, process discharge will not occur on a daily basis. Process discharge first goes through the pretreatment system. The permit also contains a requirement to notify the City prior to any changes in process discharge at either outfall.

## **INCREASED INDUSTRIAL SAMPLING FOR 2009**

### **Rohm & Haas Powder Coatings**

A one year permit was issued, effective April 1, 2009. The short term permit was written to allow time for the City to evaluate whether to reduce zinc testing from monthly to quarterly. The company installed a pretreatment system as required under their previous Consent Agreement with the City. There are still occasional zinc violations. During the course of this permit, the City is testing the incoming water at the facility on a monthly basis when sampling is done. The company believes the occasional violations are due to zinc in the incoming water. In addition, the permit requires a Daily Production Report to indicate which days zinc containing products are produced.

### **Termaco USA**

A one year permit, effective July 1, 2009, was issued. Short term permits for this new facility are still being issued since the City feels that aspects of the business that can affect the permit are not yet stabilized. Also, some permit violations have occurred and the City needs to monitor future compliance with these standards. The SOP for City sampling was changed, effective 8/5/09, to sample semiannually for volatile organic compounds.



## INCREASED INDUSTRIAL SAMPLING FOR 2009

INDUSTRY (non-SIU)	Additional City Sampling Performed	Parameters Tested	Number of Extra Tests	Additional Self Monitoring Sampling Performed	Parameters Tested	Number of Extra Tests
Air Liquide						
Diesel Service						
Getty Petroleum Marketing						
Kutztown Road Car Wash						
Neversink Brewery						
NGK Metals Corporation						
Paragon Optical	1	arsenic, copper, lead, zinc	1			
Pennsylvania Truck Centers						
Penske Truck Leasing	2	zinc	2			
		zinc	1			
Perception						
Remcon Plastics						
Rohm and Haas - R&D Lab						
Ultra Wash of Philadelphia						
Unique Pretzel Bakery						
Van Bennett Food Company						
WORLD electronics	1	oil/grease (HEM,SGT-HEM)	1	1	oil/grease (HEM,SGT-HEM)	1
	2	cyanide	2	1	oil and grease (HEM), cyanide	1

**NOTES:**

**Air Liquide Industrial**

A three year permit, effective July 1, 2009, was issued. Copper testing was changed from once to twice per year. The change was made due to occational violations.

**APPENDIX 4**

**FACILITIES IN SNC FOR 2009  
THAT WERE ALSO IN SNC FOR 2008**

**Significant Industrial Users in SNC for 2009 that were also in SNC for 2008**

<b><u>Facility</u></b>	<b><u>Reason for Significant Non-Compliance</u></b>		<b><u>Status at the end of 2009</u></b>
	<b><u>2008</u></b>	<b><u>2009</u></b>	
Clover Farms Dairy	TRC: oil and grease (HEM)	TRC and chronic: oil and grease (HEM)	SNC
Crescent Brass	TRC and chronic: copper Failure to Resample	TRC: copper TRC: mercury	Compliance Compliance
Exide Technologies- Reading Recycling	TRC: lead	TRC: oil and grease (HEM)	Compliance
National/Yorgey's Cleaners	TRC and chronic: (HEM) TRC and chronic: (SGT-HEM)	TRC and chronic: oil and grease (HEM) TRC and chronic: oil and grease (SGT-HEM) Chronic: pH	SNC SNC Compliance
Termaco USA	TRC and chronic: TTO	TRC: oil and grease (SGT-HEM) Failure to Resample TRC and chronic: phenolics	Compliance Compliance Compliance

**Non Significant Industrial Users in SNC for 2009 that were also in SNC for 2008**

<b><u>Facility</u></b>	<b><u>Reason for Significant Non-Compliance</u></b>		<b><u>Status at the end of 2009</u></b>
	<b><u>2008</u></b>	<b><u>2009</u></b>	
Paragon Optical Company	Failure to Report	TRC: copper	Compliance

# PUBLIC NOTICE

As a requirement of the City of Reading's National Pollutant Discharge Elimination System (NPDES) Permit number PA0026549, the City is required to operate an industrial pretreatment program in accordance with the Clean Water Act and the General Pretreatment Regulations (40 CFR 403). Part 40 CFR 403.8 (f) (2) (viii) of the General Regulations as well as Section 9 of the City of Reading's Sewer Use Ordinance 17-98, requires annual publication of a list of all industrial users which were in significant non-compliance (SNC) at any time during the previous twelve (12) months.

The list of significant industrial users found to be in significant non-compliance during the previous twelve months starting January 1, 2009 to December 31, 2009 along with their current compliance status is as follows:

## Cloister Car Wash & Lube

1 Cloister Court  
Sinking Spring PA 19608  
City of Reading Industrial Waste Permit No. 80

### Nature of violation:

1st Quarter - TRC violation of the zinc limit listed in its permit

### Current compliance status:

The violations were traced to the installation of some new equipment that had galvanized bolts. The company has returned to compliance.

## Clover Farms Dairy

3300 Pottsville Pike  
Reading PA 19605  
City of Reading Industrial Waste Permit No. 47H

### Nature of violations:

1st Quarter - TRC and chronic violation of the oil and grease (HEM) limit listed in its permit

2nd Quarter - TRC and chronic violation of the oil and grease (HEM) limit listed in its permit

3rd Quarter - TRC and chronic violation of the oil and grease (HEM) limit listed in its permit

4th Quarter - TRC and chronic violation of the oil and grease (HEM) limit listed in its permit

### Current compliance status:

The company had a Consent Agreement with the City of Reading that was signed on December 29, 2006 and terminated on July 31, 2008. The agreement was for the construction of a system to achieve compliance with the oil and grease and pH limits in its permit. The company is in compliance with its pH limit. However, the system did not result in compliance for oil and grease. The company segregated additional high strength waste streams and investigated other methods of achieving compliance with the new system. There is the possibility that the design plan for the system was not adequate to handle the oil and grease loadings. The company is now working on design plans for a building and a DAF system to achieve compliance for oil and grease. A time schedule for completion of the project has not yet been submitted to the City. A formalized agreement will be pursued in 2010. The company is currently subject to penalty escalations for the violations.

## Crescent Brass Manufacturing Corporation

701 Park Avenue  
Reading PA 19611  
City of Reading Industrial Waste Permit No. 73F

### Nature of violations:

1st Quarter - TRC violation of the copper limit listed in its permit

1st Quarter - TRC violation of the mercury limit listed in its permit

### Current compliance status:

The company is in SNC for copper and mercury due to a single violation for each metal that occurred during the same sampling event in March. Violations are not expected because the company took actions to obtain classification from the City as a zero industrial wastewater discharge facility. The cause of the violations is unknown. The company returned to compliance in the next sampling event conducted later in the month of March and remained in compliance in all sampling events conducted for the rest of the year.

## Exide Technologies - Reading Recycling

Spring Valley Road and Nolan Street  
Reading PA 19605  
City of Reading Industrial Waste Permit No. 34G

### Nature of violation:

2nd Quarter - TRC violation of the oil and grease (HEM) limit listed in its permit

### Current compliance status:

The company is in SNC due to one violation in three sampling events conducted during the first half of the year. The discharge to the sampling point is sanitary - not industrial and therefore violations are not expected. The cause of the violation is unknown. The company returned to compliance.

## The Hershey Company - Reading Plant

200 N. 8th Street  
Reading PA 19601  
City of Reading Industrial Waste Permit No. 38G

### Nature of violations:

1st Quarter - TRC violation of the copper limit listed in its permit at outfall 8A

2nd Quarter - TRC and chronic violation of the copper limit listed in its permit at outfall 8A

### Current compliance status:

SNC is based on two violations that occurred in the first quarter. Both of the violations occurred after the plant ceased production and was doing equipment and plant cleanup prior to closing the facility. Since this was a food manufacturing facility, the copper limit allocated to the company was low. The more extensive cleanup could have been responsible for the violations. The company did not return to compliance. Further sampling could not be conducted due to the plant closure.

## National/Yorgey's Cleaners

1700 Fairview Street  
Reading PA 19606  
City of Reading Industrial Waste Permit No. 6G

### Nature of violations:

1st Quarter - TRC and chronic violation of the oil and grease (HEM) limit listed in its permit

1st Quarter - TRC and chronic violation of the oil and grease (SGT-HEM) limit listed in its permit

2nd Quarter - TRC violation of the oil and grease (HEM) limit listed in its permit

2nd Quarter - TRC violation of the oil and grease (SGT-HEM) limit listed in its permit

3rd Quarter - Chronic violation of the pH limit listed in its permit

4th Quarter - TRC violation of the oil and grease (HEM) limit listed in its permit

4th Quarter - TRC violation of the oil and grease (SGT-HEM) limit listed in its permit

### Current compliance status:

The company is in SNC for oil and grease for three quarters of the year due to intermittent violations that occurred throughout the year. The company has not provided a specific cause of these violations. Changes in laundering schedules, procedures or client basis may be a factor. The company has not returned to compliance because a violation occurred on the last sampling

event of the year which was conducted in late December. The City will continue discussions with the company in 2010 to determine future actions that will return the company to compliance, including an increased sampling schedule to monitor compliance. SNC for pH in the third quarter is based on two violations in three sampling events conducted during the second quarter of the year. The cause of the violations is unknown. The company usually does not have compliance issues with pH. The company returned to compliance by the end of the second quarter.

## Stroehmann Bakeries.

640 Park Avenue  
Reading PA 19611  
City of Reading Industrial Waste Permit No. 16G

### Nature of violations:

1st Quarter - TRC violation of the oil and grease (HEM) limit listed in its permit at outfall 002

2nd Quarter - Failure to Resample at outfall 002

4th Quarter - TRC violation of the zinc limit listed in its permit at outfall 002

### Current compliance status:

Two violations for oil and grease occurred in the first quarter. The cause of the violations is unknown. The company returned to compliance and remained in compliance with its oil and grease limit for the rest of the year. The company failed to resample and report within 30 days following one of the violations for oil and grease at outfall 002. The required resample was submitted to the City and was in compliance. The cause of the zinc violations is currently unknown. The company has hired a consultant and testing will be conducted to isolate the problem. The company has not yet returned to compliance because additional testing was not conducted before the end of the year.

## Termaco USA, Inc.

171 Tuckerton Road  
Reading PA 10605  
City of Reading Industrial Waste Permit No. 83

### Nature of violations:

1st Quarter - TRC violation of the oil and grease (SGT-HEM) limit listed in its permit

1st Quarter - Failure to Resample

3rd Quarter - TRC and chronic violation of the phenolics limit listed in its permit

4th Quarter - TRC violation of the phenolics limit listed in its permit

### Current compliance status:

SNC for oil and grease (SGT-HEM) is based on one violation in three sampling events. The violation may have been caused by oil on the purchased steel. The company returned to compliance and remained in compliance with its oil and grease limits for the rest of the year. The company failed to resample and report within 30 days following the violation for oil and grease (SGT-HEM). The required resample was submitted to the City and was in compliance. SNC for phenolics in the third quarter is based on one violation in one sampling event conducted in September. The cause of the violation was a mechanical problem in the rinse tank that prevented overflow of the rinse water. The problem was corrected and the company returned to compliance in the next two sampling events. Another violation occurred in December. The company took corrective action and adjusted the flow rate of the wastewater discharge. The company returned to compliance in the last sampling event conducted for the year.

The list of non-significant industrial users found to be in significant non-compliance during the previous twelve months starting January 1, 2009 to December 31, 2009 along with their current compliance status is as follows:

## Paragon Optical Company Inc.

644-658 South 7th Street  
Reading PA 19602  
City of Reading Industrial Waste Permit No. M020B

### Nature of violation:

4th Quarter - TRC violation of the copper limit listed in its permit

### Current compliance status:

The company has not had a metal violation in over three years. The exact cause of the violations is unknown since the company has not yet responded to the violations. The company has returned to compliance.

## Penske Truck Leasing Company

255 Penske Plaza  
Reading PA 19602  
City of Reading Industrial Waste Permit No. M017C

### Nature of violations:

2nd Quarter - TRC and chronic violation of the zinc limit listed in its permit

4th Quarter - Failure to Resample

### Current compliance status:

SNC is based on two violations in three sampling events conducted during the first half of the year. The company returned to compliance following these violations but was not in compliance for zinc at the end of the year. The company reviewed the maintenance procedures for its oil separator/solids settling tank and subsequently changed vendors for the servicing of the tank. The company failed to resample and report within 30 days following a violation for zinc. The required resample was submitted to the City and was in compliance.

## Remcon Plastics, Inc.

208 Chestnut Street  
Reading PA 19602  
City of Reading Industrial Waste Permit No. M002D

### Nature of violations:

2nd Quarter - Chronic violation of the copper limit listed in its permit

2nd Quarter - Failure to Resample

### Current compliance status:

SNC is based on one test conducted during the first half of the year. The cause of the violation is unknown. Copper is not usually a pollutant of concern for this company. The company returned to compliance in the next sampling event. The company failed to resample and report within 30 days following the violation for copper. The required resample was submitted to the City and was in compliance.

If any additional information is required, please contact Deborah A.S. Hoag, PE, Utilities Division Manager, or Jacqueline C. Hendricks, Environmental Program Coordinator, at 610-655-6258.

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Part 40 CFR 403.8 (f) (2) (viii) of the General Regulations as well as Section 9 of the City of Reading's Sewer Use Ordinance 17-98, requires annual publication of a list of all industrial users which were in significant non-compliance (SNC) at any time during the previous twelve (12) months.

The list of significant industrial users found to be in significant non-compliance during the previous twelve months starting January 1, 2009 to December 31, 2009 along with their current compliance status is as follows:

Cloister Car Wash and Lube

1 Cloister Court

Sinking Spring PA 19608

City of Reading Industrial Waste Permit No. 80

Nature of violation:

1<sup>st</sup> Quarter – TRC violation of the zinc limit listed in its permit

Current compliance status:

The violations were traced to the installation of some new equipment that had galvanized bolts. The company has returned to compliance.

Clover Farms Dairy

3300 Pottsville Pike

Reading PA 19605

City of Reading Industrial Waste Permit No. 47H

Nature of violations:

1<sup>st</sup> Quarter – TRC and chronic violation of the oil and grease (HEM) limit listed in its permit

2<sup>nd</sup> Quarter – TRC and chronic violation of the oil and grease (HEM) limit listed in its permit

3<sup>rd</sup> Quarter – TRC and chronic violation of the oil and grease (HEM) limit listed in its permit

4<sup>th</sup> Quarter – TRC and chronic violation of the oil and grease (HEM) limit listed in its permit

Current compliance status:

The company had a Consent Agreement with the City of Reading that was signed on December 29, 2006 and terminated on July 31, 2008. The agreement was for the construction of a system to achieve compliance with the oil and grease and pH limits in its permit. The company is in compliance with its pH limit. However, the system did not result in compliance for oil and grease. The company segregated additional high strength waste streams and investigated other methods of achieving compliance with the new system. There is the possibility that the design plan for the system was not adequate to handle the oil and grease loadings. The company is now working on design plans for a building and a DAF system to achieve compliance for oil and grease. A time schedule for completion of the project has not yet been submitted to the City. A formalized agreement will be pursued in 2010. The company is currently subject to penalty escalations for the violations.

Crescent Brass Manufacturing Corporation

701 Park Avenue

Reading PA 19611

City of Reading Industrial Waste Permit No. 73F

Nature of violations:

1<sup>st</sup> Quarter – TRC violation of the copper limit listed in its permit

1<sup>st</sup> Quarter – TRC violation of the mercury limit listed in its permit

Current compliance status:

The company is in SNC for copper and mercury due to a single violation for each metal that occurred during the same sampling event in March. Violations are not expected because the company took actions to obtain classification from the City as a zero industrial wastewater discharge facility. The cause of the violations is unknown. The company returned to compliance in the next sampling event conducted later in the month of March and remained in compliance in all sampling events conducted for the rest of the year.

Exide Technologies – Reading Recycling

Spring Valley Road and Nolan Street

Reading PA 19605

City of Reading Industrial Waste Permit No. 34G

Nature of violation:

2<sup>nd</sup> Quarter – TRC violation of the oil and grease (HEM) limit listed in its permit

Current compliance status:

The company is in SNC due to one violation in three sampling events conducted during the first half of the year. The discharge to the sampling point is sanitary – not industrial and therefore violations are not expected. The cause of the violation is unknown. The company returned to compliance.

The Hershey Company – Reading Plant

200 N. 8<sup>th</sup> Street

Reading PA 19601

City of Reading Industrial Waste Permit No. 38G

Nature of violations:

1<sup>st</sup> Quarter – TRC violation of the copper limit listed in its permit at outfall 8A

2<sup>nd</sup> Quarter – TRC and chronic violation of the copper limit listed in its permit at outfall 8A

Current compliance status:

SNC is based on two violations that occurred in the first quarter. Both of the violations occurred after the plant ceased production and was doing equipment and plant cleanup prior to closing the facility. Since this was a food manufacturing facility, the copper limit allocated to the company was low. The more extensive cleanup could have been responsible for the violations. The company did not return to compliance. Further sampling could not be conducted due to the plant closure.

National/Yorgey's Cleaners

1700 Fairview Street

Reading PA 19606

City of Reading Industrial Waste Permit No. 6G

Nature of violations:

1<sup>st</sup> Quarter – TRC and chronic violation of the oil and grease (HEM) limit listed in its permit

1<sup>st</sup> Quarter – TRC and chronic violation of the oil and grease (SGT-HEM) limit listed in its permit

2<sup>nd</sup> Quarter – TRC violation of the oil and grease (HEM) limit listed in its permit

2<sup>nd</sup> Quarter – TRC violation of the oil and grease (SGT-HEM) limit listed in its permit

3<sup>rd</sup> Quarter – Chronic violation of the pH limit listed in its permit

4<sup>th</sup> Quarter – TRC violation of the oil and grease (HEM) limit listed in its permit

4<sup>th</sup> Quarter – TRC violation of the oil and grease (SGT-HEM) limit listed in its permit

Current compliance status:

The company is in SNC for oil and grease for three quarters of the year due to intermittent violations that occurred throughout the year. The company has not provided a specific cause of these violations. Changes in laundering schedules, procedures or client basis may be a factor. The company has not returned to compliance because a violation occurred on the last sampling event of the year which was

conducted in late December. The City will continue discussions with the company in 2010 to determine future actions that will return the company to compliance, including an increased sampling schedule to monitor compliance. SNC for pH in the third quarter is based on two violations in three sampling events conducted during the second quarter of the year. The cause of the violations is unknown. The company usually does not have compliance issues with pH. The company returned to compliance by the end of the second quarter.

Stroehmann Bakeries.

640 Park Avenue

Reading PA 19611

City of Reading Industrial Waste Permit No. 16G

Nature of violations:

1<sup>st</sup> Quarter – TRC violation of the oil and grease (HEM) limit listed in its permit at outfall 002

2<sup>nd</sup> Quarter – Failure to Resample at outfall 002

4<sup>th</sup> Quarter – TRC violation of the zinc limit listed in its permit at outfall 002

Current compliance status:

Two violations for oil and grease occurred in the first quarter. The cause of the violations is unknown. The company returned to compliance and remained in compliance with its oil and grease limit for the rest of the year. The company failed to resample and report within 30 days following one of the violations for oil and grease at outfall 002. The required resample was submitted to the City and was in compliance. The cause of the zinc violations is currently unknown. The company has hired a consultant and testing will be conducted to isolate the problem. The company has not yet returned to compliance because additional testing was not conducted before the end of the year.

Termaco USA, Inc.

171 Tuckerton Road

Reading PA 10605

City of Reading Industrial Waste Permit No. 83

Nature of violations:

1<sup>st</sup> Quarter – TRC violation of the oil and grease (SGT-HEM) limit listed in its permit

1<sup>st</sup> Quarter – Failure to Resample

3<sup>rd</sup> Quarter – TRC and chronic violation of the phenolics limit listed in its permit

4<sup>th</sup> Quarter – TRC violation of the phenolics limit listed in its permit

Current compliance status:

SNC for oil and grease (SGT-HEM) is based on one violation in three sampling events. The violation may have been caused by oil on the purchased steel. The company returned to compliance and remained in compliance with its oil and grease limits for the rest of the year. The company failed to resample and report within 30 days following the violation for oil and grease (SGT-HEM). The required resample was submitted to the City and was in compliance. SNC for phenolics in the third quarter is based on one violation in one sampling event conducted in September. The cause of the violation was a mechanical problem in the rinse tank that prevented overflow of the rinse water. The problem was corrected and the company returned to compliance in the next two sampling events. Another violation occurred in December. The company took corrective action and adjusted the flow rate of the wastewater discharge. The company returned to compliance in the last sampling event conducted for the year.

The list of non-significant industrial users found to be in significant non-compliance during the previous twelve months starting January 1, 2009 to December 31, 2009 along with their current compliance status is as follows:

Paragon Optical Company Inc.



644-658 South 7<sup>th</sup> Street  
Reading PA 19602  
City of Reading Industrial Waste Permit No. M020B

Nature of violation:

4<sup>th</sup> Quarter – TRC violation of the copper limit listed in its permit

Current compliance status:

The company has not had a metal violation in over three years. The exact cause of the violations is unknown since the company has not yet responded to the violations. The company has returned to compliance.

Penske Truck Leasing Company  
255 Penske Plaza  
Reading PA 19602  
City of Reading Industrial Waste Permit No. M017C

Nature of violations:

2<sup>nd</sup> Quarter – TRC and chronic violation of the zinc limit listed in its permit

4<sup>th</sup> Quarter – Failure to Resample

Current compliance status:

SNC is based on two violations in three sampling events conducted during the first half of the year. The company returned to compliance following these violations but was not in compliance for zinc at the end of the year. The company reviewed the maintenance procedures for its oil separator/solids settling tank and subsequently changed vendors for the servicing of the tank. The company failed to resample and report within 30 days following a violation for zinc. The required resample was submitted to the City and was in compliance.

Remcon Plastics, Inc.  
208 Chestnut Street  
Reading PA 19602  
City of Reading Industrial Waste Permit No. M002D

Nature of violations:

2<sup>nd</sup> Quarter – Chronic violation of the copper limit listed in its permit

2<sup>nd</sup> Quarter – Failure to Resample

Current compliance status:

SNC is based on one test conducted during the first half of the year. The cause of the violation is unknown. Copper is not usually a pollutant of concern for this company. The company returned to compliance in the next sampling event. The company failed to resample and report within 30 days following the violation for copper. The required resample was submitted to the City and was in compliance.

If any additional information is required, please contact Deborah A.S. Hoag, PE, Utilities Division Manager, or Jacqueline C. Hendricks, Environmental Program Coordinator, at 610-655-6258.

**APPENDIX 6**

**ENFORCEMENT ACTIONS**

## 2009 ENFORCEMENT ACTIONS

### Significant Industrial Users

Industry Name	Enforcement Action				Nature of Violation
	Compliance Schedule	Notice of Violation	Admin Order	Penalty Assessed	
Aramark Uniform Services	None	4	None	\$400	2 oil and grease (HEM), 2 oil and grease (SGT-HEM)
The Bachman Company	None	1	None	\$50	1 late report
Berks Packing Company	None	4	None	\$1,250	* 4 oil and grease (HEM)
Carpenter Technology	None	None	None		
Cloister Car Wash and Lube	None	9	None	\$1,950	* 7 zinc, 2 copper
Clover Farms Dairy	None	29	None	\$34,600	* 28 oil and grease (HEM), 1 pH
Crescent Brass Manufacturing	None	3	None	\$300	1 copper, 1 mercury, 1 lead
Cryovac Food Packaging	None	1	None	\$100	1 copper
Dietrich's Milk Products	None	8	None	\$22,600	* 7 oil and grease (HEM), 1 pH
Evergreen Community Power	None	None	None		
Exide - Plant One	None	1	None	\$100	1 lead
Exide - Plant Two	None	None	None		
Exide - Reading Recycling	None	1	None	\$100	1 oil and grease (HEM)
Hershey Company-Reading Plant	None	2	None	\$200	2 copper at outfall 8A
Hofmann Industries	None	2	None	\$350	1 zinc - monthly average, 1 late sampling
IFS Industries	None	6	None	\$10,200	* 4 oil and grease (HEM), 2 oil and grease (SGT-HEM)
Interstate Container	None	5	None	\$500	3 color, 1 oil and grease (HEM), 1 oil and grease (SGT-HEM)
Lentz Milling	None	2	None	\$200	1 oil and grease (HEM), 1 oil and grease (SGT-HEM)
National/Yorgey's Cleaners	None	9	None	\$850	3 oil and grease (HEM), 3 oil and grease (SGT-HEM), 2 pH, 1 late report
Power Packaging	None	1	None	\$100	1 pH
Prizer Works	None	2	None	\$200	1 oil and grease (HEM), 1 oil and grease (SGT-HEM)
Quadrant EEP USA	None	None	None		
Quaker Maid Meats	None	None	None		
Reading Eagle Company	None	None	None		
Reading Plating & Polishing	None	1	None	\$100	1 nickel
Reading Truck Body	None	3	None	\$300	1 zinc - daily maximum, 1 zinc - monthly average
					1 failure to report all test results, less than 30 days late and in compliance
Reitech Corporation	None	None	None		
Rohm and Haas Powder Coatings	None	1	None	\$100	* 1 zinc
Sealed Air Corporation	None	None	None		
St Joseph Downtown	None	None	None		

## 2009 ENFORCEMENT ACTIONS

### Significant Industrial Users

Industry Name	Enforcement Action				Nature of Violation
	Compliance Schedule	Notice of Violation	Admin Order	Penalty Assessed	
Stroehmann Bakeries	None	12	None	\$1,850 *	3 zinc at outfall 002, 2 oil and grease (HEM) at outfall 002, 1 pH at outfall 002
					1 copper at outfall 001, 1 phenolics at outfall 001
					1 Failure to Resample at outfall 002, 2 late resampling at outfall 002, 1 late report
Summit Steel and Manufacturing	None	N/A <sup>1</sup>	None		
Sun Rich Fresh Foods	None	2	None	\$100	2 late report
Sweet Street Desserts	None	None	None		
Termaco USA	None	6	None	\$900 *	1 Failure to Resample, 1 oil and grease (SGT-HEM), 2 phenolics, 2 late report
Tom Sturgis Pretzels	None	2	None	\$200	2 pH
United Corrstack	None	3	None	\$250	2 mercury, 1 late report
Yuasa Battery	None	None	None		
<b>TOTAL</b>	0	120	0	\$77,850	

Initial fines for violations are as follows:

Failure to Report	\$1,000
Failure to Resample	\$500
Permit Limit violation	\$100
Late report	\$50
Late sampling/resampling	\$250
Failure to Report Violations	\$1,000
Failure to Report Monitoring Data	\$1,000
Failure to Report all test results, <30 days late, in compliance	\$100

NOTES: <sup>1</sup> Company has not discharged this year.

#### NOTES ON FINES ADMINISTERED:

**Berks Packing Company:** Oil and grease violations (HEM) were fined at \$250 per occurrence for the second and third quarter. 3 were fined at this rate. Oil and grease violations were escalated to \$500 per occurrence beginning the fourth quarter. 1 was fined at this rate.

**Cloister Car Wash and Lube:** Zinc violations were fined at \$250 per occurrence. In accordance with the City's Penalty Escalation Policy, the fine will escalate from \$250 to \$500 per occurrence beginning in the first quarter of 2010. After 4 quarters of consistent compliance, the fine for a copper violation was reduced to the base amount of \$100 per occurrence. This began the third quarter. 2 were fined at this rate.

## **2009 ENFORCEMENT ACTIONS**

### **Significant Industrial Users**

#### **NOTES ON FINES ADMINISTERED:**

**Clover Farms Dairy:** Oil and grease violations (HEM) were escalated to \$1000 per occurrence beginning the first quarter. 15 were fined at this rate. Oil and grease (HEM) violations were escalated to \$1500 per occurrence beginning the third quarter. 13 were fined at this rate. In accordance with the City's Penalty Escalation Policy, the fine will escalate from \$1500 to \$2000 per occurrence beginning in the first quarter of 2010. After 4 quarters of consistent compliance, the fine for a pH violation was reduced to the base amount of \$100 per occurrence. This began the fourth quarter. 1 was fined at this rate.

**Dietrich's Milk Products:** Oil and grease violations (HEM) were fined at \$3000 per occurrence for the first and second quarter. 4 were fined at this rate. Oil and grease violations were escalated to \$3500 per occurrence beginning the third quarter. 3 were fined at this rate. In accordance with the City's Penalty Escalation Policy, the fine will escalate from \$3500 to \$4000 per occurrence beginning in the first quarter of 2010.

**IFS:** Oil and grease violations (HEM) were fined at \$2500 per occurrence. Oil and grease violations (SGT-HEM) were fined at \$100 per occurrence.

**Rohm and Haas Powder Coatings:** After 4 quarters of consistent compliance, the fine for a zinc violation was reduced to the base amount of \$100 per occurrence. This began in the fourth quarter. 1 was fined at this rate.

**Stroehmann Bakeries:** In accordance with the City's Penalty Escalation Policy, the fine for any zinc violation at outfall 002 will escalate from \$100 to \$250 per occurrence beginning in the first quarter of 2010.

**Termaco USA:** In accordance with the City's Penalty Escalation Policy, the fine for any phenolics violation will escalate from \$100 to \$250 per occurrence beginning in the first quarter of 2010.

## 2009 ENFORCEMENT ACTIONS

### Non-Significant Industrial Users

Industry Name	Enforcement Action				Nature of Violation
	Compliance Schedule	Notice of Violation	Admin Order	Penalty Assessed	
Air Liquide	None	None	None		
Diesel Service	None	None	None		
Getty Petroleum Marketing	None	1	None	\$250.00	1 sampling in wrong month
Kutztown Road Car Wash	None	None	None		
Neversink Brewery	None	1	None	\$100.00	1 pH
NGK Metals Corporation	None	None	None		
Paragon Optical	None	5	None	\$450.00	2 copper, 1 lead, 1 arsenic, 1 late report
Pennsylvania Truck Centers	None	None	None		
Penske Truck Leasing	None	6	None	\$1,300	5 zinc, 1 Failure to Resample
Perception	None	None	None		
Remcon Plastics	None	3	None	\$850.00	1 Failure to Resample, 1 late sampling, 1 copper
Rohm & Haas Chemicals - R&D Lab	None	None	None		
Ultra Wash of Philadelphia	None	1	None	\$50.00	1 late report
Unique Pretzel Bakery	None	1	None	\$100.00	1 pH
Van Bennett Food Company	None	1	None	\$100.00	1 oil and grease (HEM)
WORLD electronics	None	3	None	\$300.00	1 oil and grease (HEM), 1 oil and grease (SGT-HEM), 1 cyanide
<b>TOTAL</b>	0	22	0	\$3,500.00	

Initial fines for violations are as follows:

Failure to Report	\$1,000
Failure to Resample	\$500
Permit Limit violation	\$100
Late report	\$50
Late sampling/resampling	\$250
Failure to Report Violations	\$1,000
Failure to Report Monitoring Data	\$1,000
Sampling in wrong month	\$250

#### **NOTES ON FINES ADMINISTERED:**

**Penske Truck Leasing:** Zinc violations were fined at \$100 per occurrence for the second and third quarter. 3 were fined at this rate. Zinc violations were escalated to \$250 per occurrence beginning the fourth quarter. 2 were fined at this rate.

**APPENDIX 7**

**PAYMENT STATUS**

# City of Reading Industrial Pretreatment

## Penalty Payment Status

### Industrial Waste Register Bill Summary

4/1/2009 to 3/29/2010

<u>License No.</u>	<u>Name</u>	<u>Issue Date</u>	<u>Comments</u>	<u>Billed</u>	<u>Paid</u>	<u>PaidDate</u>
<b>April 2009</b>						
<b>FINES - 54-07-00-3622</b>						
337763	CRESCENT BRASS MANUFACTURING	04/01/2009		\$265.05	-\$265.05	04/02/2009
337763	CRESCENT BRASS MANUFACTURING	04/21/2009		\$265.05	-\$265.05	04/24/2009
<b>Total for FINES :</b>				<b>\$530.10</b>	<b>(\$530.10)</b>	

**Total for the month of April 2009 :** **\$530.10 (\$530.10)**

### May 2009

<b>FINES - 54-07-00-3622</b>						
341901	CLOISTER CAR WASH AND LUBE	05/20/2009	1ST Q 2009	\$750.00	-\$750.00	06/11/2009
331117	CLOVER FARMS DAIRY	05/20/2009	1ST Q 2009	\$7,000.00	-\$7,000.00	06/24/2009
337763	CRESCENT BRASS MANUFACTURING	05/20/2009	1ST Q 2009	\$300.00	-\$300.00	06/03/2009
337763	CRESCENT BRASS MANUFACTURING	05/26/2009		\$265.05	-\$265.05	06/02/2009
334378	DIETRICH MILK PRODUCTS	05/20/2009	1ST Q 2009	\$9,000.00	-\$9,000.00	06/11/2009
337766	EXIDE CORPORATION	05/20/2009	1ST Q 2009	\$200.00	-\$200.00	07/13/2009
331112	HERSHEY CHOCOLATE	05/20/2009	1ST Q 2009	\$200.00	-\$200.00	07/16/2009
331089	IFS INDUSTRIES	05/21/2009	1ST Q 2009	\$2,500.00	-\$2,500.00	07/13/2009
331628	INTERSTATE CONTAINER READING	05/21/2009	1ST Q 2009	\$100.00	-\$100.00	06/03/2009
336996	NATIONAL/YORGEY'S CLEANERS	05/21/2009	1ST Q 2009	\$200.00	-\$200.00	06/11/2009
337729	POWER PACKAGING INC	05/21/2009	1ST Q 2009	\$100.00	-\$100.00	06/11/2009
337716	TOM STURGIS PRETZELS INC	05/26/2009	1ST Q 2009	\$100.00	-\$100.00	06/19/2009
338340	VAN BENNETT	05/26/2009	1ST Q 2009	\$100.00	-\$100.00	06/16/2009
<b>Total for FINES :</b>				<b>\$20,815.05</b>	<b>(\$20,815.05)</b>	

**Total for the month of May 2009 :** **\$20,815.05 (\$20,815.05)**



**June 2009****FINES - 54-07-00-3622**

356733	GEORGE WESTON BAKERIES	06/01/2009	1ST Q 2009	\$700.00	-\$700.00	06/22/2009
345103	SUN RICH FRESH FOODS INC	06/01/2009	1ST Q 2009	\$50.00	-\$50.00	07/16/2009
358062	TERMACO USA	06/01/2009	1ST Q 2009	\$650.00	-\$650.00	08/12/2009
<b>Total for FINES :</b>				<b>\$1,400.00</b>	<b>(\$1,400.00)</b>	

**Total for the month of June 2009 :** **\$1,400.00** **(\$1,400.00)**

**July 2009****FINES - 54-07-00-3622**

337763	CRESCENT BRASS MANUFACTURING	07/10/2009		\$265.05	-\$265.05	07/13/2009
337763	CRESCENT BRASS MANUFACTURING	07/08/2009		\$265.05	-\$265.05	07/13/2009
<b>Total for FINES :</b>				<b>\$530.10</b>	<b>(\$530.10)</b>	

**Total for the month of July 2009 :** **\$530.10** **(\$530.10)**

**August 2009****FINES - 54-07-00-3622**

331155	ARAMARK UNIFORM SERVICES	08/24/2009	2ND Q 2009	\$200.00	-\$200.00	09/16/2009
331620	BERKS PACKING	08/24/2009	2ND Q 2009	\$250.00	-\$250.00	09/10/2009
331117	CLOVER FARMS DAIRY	08/24/2009	2ND Q 2009	\$8,000.00	-\$8,000.00	09/23/2009
334378	DIETRICH MILK PRODUCTS	08/24/2009	2ND Q 2009	\$3,000.00	-\$3,000.00	09/16/2009
351177	GETTY PETROLEUM MARKETING	08/24/2009	2ND Q 2009	\$250.00	-\$250.00	10/09/2009
331089	IFS INDUSTRIES	08/24/2009	2ND Q 2009	\$2,700.00	-\$2,700.00	10/05/2009
331628	INTERSTATE CONTAINER READING	08/24/2009	2ND Q 2009	\$100.00	-\$100.00	09/16/2009
336996	NATIONAL/YORGEY'S CLEANERS	08/24/2009	2ND Q 2009	\$400.00	\$0.00	#####
331154	PENSKE TRUCK LEASING	08/24/2009	2ND Q 2009	\$200.00	-\$200.00	09/14/2009
337726	READING PLATING & POLISHING	08/26/2009	2ND Q 2009	\$100.00	-\$100.00	09/10/2009
334341	REMCON PLASTICS INC	08/26/2009	2ND Q 2009	\$850.00	-\$850.00	09/23/2009
331279	STROEHMANN BAKERIES LLC	08/26/2009	2ND Q 2009	\$500.00	-\$500.00	09/15/2009
358062	TERMACO USA	08/26/2009	2ND Q 2009	\$50.00	-\$50.00	10/05/2009
337715	UNIQUE PRETZELS	08/26/2009	2ND Q 2009	\$100.00	-\$100.00	09/16/2009
337713	UNITED CORRSTACK	08/26/2009	2ND Q 2009	\$100.00	-\$100.00	09/21/2009
337711	WORLD ELECTRONICS	08/26/2009	2ND Q 2009	\$300.00	-\$300.00	09/14/2009
<b>Total for FINES :</b>				<b>\$17,100.00</b>	<b>(\$16,700.00)</b>	

**Total for the month of August 2009 :** **\$17,100.00** **(\$16,700.00)**

**September 2009****FINES - 54-07-00-3622**

337763	CRESCENT BRASS MANUFACTURING	09/23/2009	\$265.05	-\$265.05	09/24/2009
337763	CRESCENT BRASS MANUFACTURING	09/03/2009	\$265.05	-\$265.05	09/04/2009
<b>Total for FINES :</b>			<b>\$530.10</b>	<b>(\$530.10)</b>	

**Total for the month of September 2009 :** **\$530.10** **(\$530.10)**

**October 2009****FINES - 54-07-00-3622**

337763	CRESCENT BRASS MANUFACTURING	10/23/2009	\$265.05	-\$265.05	10/26/2009
<b>Total for FINES :</b>			<b>\$265.05</b>	<b>(\$265.05)</b>	

**Total for the month of October 2009 :** **\$265.05** **(\$265.05)**

**November 2009****FINES - 54-07-00-3622**

337763	CRESCENT BRASS MANUFACTURING	11/20/2009	\$265.05	-\$265.05	11/23/2009
<b>Total for FINES :</b>			<b>\$265.05</b>	<b>(\$265.05)</b>	

**Total for the month of November 2009 :** **\$265.05** **(\$265.05)**

**December 2009****FINES - 54-07-00-3622**

337763	CRESCENT BRASS MANUFACTURING	12/11/2009	\$265.05	-\$265.05	12/16/2009
331154	PENSKE TRUCK LEASING	12/30/2009 3RD Q 2009	\$100.00	-\$100.00	01/27/2010
331279	STROEHMANN BAKERIES LLC	12/18/2009 3RD Q 2009	\$550.00	-\$550.00	01/07/2010
358062	TERMACO USA	12/18/2009 3RD Q 2009	\$100.00	\$0.00	#####
337713	UNITED CORRSTACK	12/18/2009 3RD Q 2009	\$100.00	-\$100.00	01/19/2010
<b>Total for FINES :</b>			<b>\$1,115.05</b>	<b>(\$1,015.05)</b>	

**Total for the month of December 2009 :** **\$1,115.05** **(\$1,015.05)**

**January 2010****FINES - 54-07-00-3622**

331620	BERKS PACKING	01/05/2010	3RD Q 2009	\$500.00	-\$500.00	01/25/2010
341901	CLOISTER CAR WASH AND LUBE	01/05/2010	3RD Q 2009	\$700.00	-\$700.00	01/28/2010
331117	CLOVER FARMS DAIRY	01/05/2010	3RD Q 2009	\$9,000.00	-\$9,000.00	02/10/2010
331113	CRYOVAC INC	01/05/2010	3RD Q 2009	\$100.00	-\$100.00	03/08/2010
334378	DIETRICH MILK PRODUCTS	01/05/2010	3RD Q 2009	\$7,000.00	-\$7,000.00	02/04/2010
338910	HOFMANN INDUSTRIES	01/05/2010	3RD Q 2009	\$350.00	-\$350.00	02/10/2010
331628	INTERSTATE CONTAINER READING	01/05/2010	3RD Q 2009	\$200.00	-\$200.00	01/28/2010
<b>Total for FINES :</b>				<b>\$17,850.00</b>	<b>(\$17,850.00)</b>	

**Total for the month of January 2010 :** **\$17,850.00** **(\$17,850.00)**

**February 2010****FINES - 54-07-00-3622**

331155	ARAMARK UNIFORM SERVICES	02/19/2010	4TH Q 2009	\$200.00	-\$200.00	03/09/2010
337760	BACHMAN COMPANY	02/24/2010	4TH Q 2009	\$50.00	\$0.00	#####
331620	BERKS PACKING	02/19/2010	4TH Q 2009	\$500.00	-\$500.00	03/11/2010
341901	CLOISTER CAR WASH AND LUBE	02/19/2010	4TH Q 2009	\$500.00	-\$500.00	03/23/2010
331117	CLOVER FARMS DAIRY	02/22/2010	4TH Q 2009	\$10,600.00	-\$10,600.00	03/24/2010
337763	CRESCENT BRASS MANUFACTURING	02/12/2010		\$265.05	-\$265.05	02/25/2010
337763	CRESCENT BRASS MANUFACTURING	02/12/2010		\$265.05	-\$265.05	02/25/2010
334378	DIETRICH MILK PRODUCTS	02/22/2010	4TH Q 2009	\$3,600.00	\$0.00	#####
331089	IFS INDUSTRIES	02/22/2010	4TH Q 2009	\$5,000.00	-\$5,000.00	03/25/2010
331628	INTERSTATE CONTAINER READING	02/22/2010	4TH Q 2009	\$100.00	-\$100.00	03/16/2010
338345	LENTZ MILLING	02/24/2010	4TH Q 2009	\$200.00	-\$200.00	03/16/2010
336996	NATIONAL/YORGEY'S CLEANERS	02/26/2010	4TH Q 2009	\$250.00	\$0.00	#####
331088	NEVERSINK BREWERY	02/24/2010	4TH Q 2009	\$100.00	\$0.00	#####
331154	PENSKE TRUCK LEASING	02/24/2010	4TH Q 2009	\$1,000.00	-\$1,000.00	03/11/2010
331621	PRIZER PAINTER STOVE WORKS	02/24/2010	4TH Q 2009	\$200.00	-\$200.00	03/25/2010
340271	READING TRUCK BODY LLC	02/24/2010	4TH Q 2009	\$300.00	-\$300.00	03/24/2010
331623	ROHM AND HAAS CHEMICALS LLC	02/26/2010	4TH Q 2009	\$100.00	-\$100.00	03/23/2010
331279	STROEHMANN BAKERIES LLC	02/26/2010	4TH Q 2009	\$100.00	-\$100.00	03/29/2010
345103	SUN RICH FRESH FOODS INC	02/26/2010	4TH Q 2009	\$50.00	\$0.00	#####
358062	TERMACO USA	02/26/2010	4TH Q 2009	\$100.00	-\$100.00	03/29/2010
337716	TOM STURGIS PRETZELS INC	02/26/2010	4TH Q 2009	\$100.00	-\$100.00	03/18/2010
337713	UNITED CORRSTACK	02/26/2010	4TH Q 2009	\$50.00	-\$50.00	03/25/2010
<b>Total for FINES :</b>				<b>\$23,630.10</b>	<b>(\$19,580.10)</b>	

**Total for the month of February 2010 :** **\$23,630.10** **(\$19,580.10)**

**March 2010**

**FINES - 54-07-00-3622**

337763	CRESCENT BRASS MANUFACTURING	03/12/2010		\$265.05	-\$265.05	03/17/2010
337731	PARAGON OPTICAL	03/08/2010	4TH Q 2009	\$450.00	\$0.00	#####
353002	ULTRA WASH OF PHILADELPHIA INC	03/08/2010	4TH Q 2009	\$50.00	-\$50.00	03/25/2010
<b>Total for FINES :</b>				<b>\$765.05</b>	<b>(\$315.05)</b>	

**Total for the month of March 2010 :** **\$765.05** **(\$315.05)**

**Grand Total :** **\$84,795.65** **(\$79,795.65)**

03/29/2010

## **APPENDIX 8**

### **2009 WEEKLY MERCURY TESTING AT PLANT INFLUENT POINTS AND PLANT EFFLUENT**

#### **MONTHLY 503 ANALYSIS FOR PLANT BIOSOLIDS**

#### **ANNUAL PRIORITY POLLUTANT SCANS ON PLANT INFLUENT, EFFLUENT AND BIOSOLIDS**

##### **PERFORMED:**

3/3-4/09:	Influent and Effluent
3/4/09:	Biosolids
3/4/09 and 9/2/09:	Biosolids Form U

#### **QUATERLY INFLUENT, EFFLUENT AND BIOSOLIDS SAMPLING**

## Reading Pretreatment Monitoring Data

### Influent Monitoring Data (mg/l)

Date	Goal	3/3-4/2009	6/2-3/2009	8/13-14/09	11/4-5/09
Arsenic	0.0594	<0.005	<0.005	<0.005	<0.005
Cadmium	0.0198	0.0014	0.0012	<0.001	0.0018
Chromium	0.1293	0.028	0.019	0.021	0.040
Copper	0.1602	0.12	0.11	0.086	0.22
Cyanide (T)	0.34	0.006	<0.005	<0.005	<0.005
Cyanide (free)	0.023	<0.005	<0.005	<0.005	0.005
Lead	0.0581	0.024	0.019	0.017	0.092
Mercury	0.0002	0.0003	0.0002	0.0002	0.0007
Molybdenum	0.0141	0.034	0.029	0.029	0.062
Nickel	0.4668	0.062	0.035	<0.01	0.022
Selenium	0.027	<0.01			
Silver	0.0989	0.0026	<0.002	<0.002	0.0047
Zinc	0.3825	0.42	0.37	0.30	0.69
Phenols (T)	0.3618	0.08	0.04	0.04	0.04

### Effluent Monitoring Data (mg/l)

Date	Goal	3/3-4/2009	6/2-3/2009	8/13-14/09	11/4-5/09
Arsenic	0.427	<0.005	<0.005	<0.005	<0.005
Cadmium	0.018	<0.001	<0.001	<0.001	<0.001
Chromium	0.022	0.0034	0.0025	0.0053	0.0049
Copper	0.075	0.018	0.018	0.014	0.016
Cyanide (T)		0.007	<0.005	<0.005	<0.005
Cyanide (free)	0.023	<0.005	<0.005	<0.005	<0.005
Lead	0.111	<0.003	<0.003	<0.003	<0.003
Mercury	0.00007	<0.00007	<0.00007	<0.00007	<0.00007
Molybdenum		0.028	0.021	0.028	0.041
Nickel	3.43	0.011	0.011	<0.01	<0.01
Selenium	0.027	<0.01			
Silver	0.037	<0.002	<0.002	<0.002	<0.002
Zinc	0.406	0.092	0.073	0.067	0.077
Phenols (T)	0.136	0.01	<0.01	<0.01	<0.01

## Mercury Testing for 2009 at Plant Influent Points and Plant Effluent

Date		Grit Chamber mg/L		6th Street mg/L		Influent mg/L		Effluent mg/L
01/06/09		0.00008		0.00009		0.0003	<	0.00007
01/07/09		0.0001	<	0.00007		0.0003	<	0.00007
01/14/09		0.0001		0.00007		0.0003	<	0.00007
1/20/2009		0.0002	<	0.00007		0.0005	<	0.00007
1/27/2009		0.0002		0.0002		0.0004	<	0.00007
2/3/2009		0.0001		0.0001		0.0002	<	0.00007
2/4/2009		0.00009		0.0002		0.0003	<	0.00007
2/9/2009		0.0001		0.0001		0.0013	<	0.00007
2/17/2009	<	0.00007	<	0.00007		0.0001	<	0.00007
2/24/2009		0.0001		0.0003		0.0001	<	0.00007
3/3/2009		0.0003		0.00007		0.0003	<	0.00007
3/4/2009		0.00008				0.0003	<	0.00007
3/5/2009				0.0002				
3/10/2009		0.0001				0.0003	<	0.00007
3/13/2009				0.0003				
3/17/2009		0.0001		0.0015		0.0003	<	0.00007
3/24/2009		0.0002	<	0.00007		0.0007	<	0.00007
4/1/2009	<	0.00007		0.0001		0.0001	<	0.00007
4/7/2009	<	0.00007	<	0.00007		0.0001	<	0.00007
4/14/2009		0.0002		0.0001		0.00009	<	0.00007
4/21/2009		0.0003		0.00009		0.0004	<	0.00007
4/28/2009	<	0.00007		0.0002		0.0002	<	0.00007
5/5/2009	<	0.00007	<	0.00007		0.0006	<	0.00007
5/7/2009	<	0.00007	<	0.00007		0.0002	<	0.00007
5/12/2009		0.0002		0.0003		0.0007	<	0.00007
5/19/2009		0.0003		0.00009		0.0002	<	0.00007
5/26/2009		0.0002	<	0.00007		0.0002	<	0.00007
6/2/2009		0.00007		0.00009		0.0001	<	0.00007
6/3/2009		0.0022	<	0.00007		0.00008	<	0.00007
6/9/2009		0.0001		0.0001		0.0001	<	0.00007
6/16/2009		0.00009			<	0.00007	<	0.00007
			<	0.00007				
6/23/2009	<	0.00007	<	0.00007	<	0.00007	<	0.00007
6/30/2009		0.0001		0.0003		0.0003	<	0.00007
7/1/2009		0.0006		0.0001		0.0001	<	0.00007
7/7/2009		0.0002		0.00008		0.0001	<	0.00007
						0.0001	<	0.00007
7/14/2009	<	0.00007		0.0009	<	0.00007	<	0.00007
7/21/2009		0.0003	<	0.00007		0.0005	<	0.00007
7/28/2009	<	0.00007	<	0.00007		0.0003	<	0.00007
8/4/2009	<	0.00007		0.0002		0.0004	<	0.00007
8/11/2009	<	0.00007		0.00009		0.0001	<	0.00007
8/12/2009	<	0.00007	<	0.00007		0.0004	<	0.00007
8/13/2009	<	0.00007	<	0.00007		0.0002	<	0.00007

Date		Grit Chamber mg/L		6th Street mg/L		Influent mg/L		Effluent mg/L
8/18/2009	<	0.00007		0.0001	<	0.00007	<	0.00007
8/25/2009	<	0.00007		0.0002		0.0004	<	0.00007
9/1/2009	<	0.00007	<	0.00007		0.0005	<	0.00007
9/2/2009		0.0001		0.00007		0.0009	<	0.00007
9/8/2009		0.00007	<	0.00007		0.0005	<	0.00007
9/15/2009		0.0008	<	0.00007		0.0001	<	0.00007
9/22/2009	<	0.00007	<	0.00007		0.00008	<	0.00007
9/29/2009	<	0.00007		0.00008		0.0002	<	0.00007
10/6/2009		0.0001		0.0002		0.0004	<	0.00007
10/7/2009	<	0.00007	<	0.00007	<	0.00007	<	0.00007
10/13/2009		0.00007		0.0001		0.0001	<	0.00007
10/20/2009		0.00008	<	0.00007		0.0001	<	0.00007
10/27/2009		0.00009	<	0.00007		0.0004	<	0.00007
11/3/2009		0.00008		0.0001		0.0002	<	0.00007
11/4/2009	<	0.00007	<	0.00007		0.0007	<	0.00007
11/10/2009	<	0.00007		0.0002		0.0004	<	0.00007
11/17/2009		0.0001	<	0.00007		0.0002	<	0.00007
11/24/2009		0.0001		0.0002		0.0006	<	0.00007
12/1/2009		0.0001		0.0001		0.0005	<	0.00007
12/2/2009		0.0002		0.0014		0.0003	<	0.00007
12/8/2009	<	0.00007		0.0001		0.0004	<	0.00007
12/15/2009	<	0.00007		0.0002		0.00009	<	0.00007
12/22/2009		0.0001		0.0001		0.0003	<	0.00007
12/29/2009		0.0002		0.0001		0.0001	<	0.00007



# Reading Pretreatment Monitoring Data

## Sludge Monitoring Data (mg/kg dry weight)

		503	503	503	Priority	Form U	3/4/2009	503	503	503	Quarterly	6/2/2009	503
		Analysis	Analysis	Analysis	Pollutants		Average	Analysis	Analysis	Analysis	Testing	Average	Analysis
Date	Goal	1/5-6/09	2/4/2009	3/4/2009	3/4/2009	3/4/2009	3/4/2009	4/8/2009	5/6/2009	6/2/2009	6/2/2009	6/2/2009	7/13/2009
Arsenic	41	2.85	2.52	<2.94	<13.4	<13.9	<13.9	4.27	4.74	5.01	<9.7	4.9	4.28
Cadmium	39	3.75	3.97	3.21	4.0	4.9	4.0	4.39	4.98	4.16	4.0	4.1	3.91
Chromium		120.8	114.8	104.7	117	93.7	105.1	109.6	151.4	110.8	110	110.4	128.7
Copper	1500	565.1	525.5	522.1	501	402	475.0	504.4	558.5	496.9	513	505.0	629.9
Cyanide (T)					2.3		2.3				1.4	1.4	
Cyanide (free)					<1.3		<1.3				<1.4	<1.4	
Lead	300	116.6	129.3	106.6	113	89.8	103.1	127.5	130.5	113.7	116	114.9	158.4
Mercury	17	5.17	3.38	2.45	2.7	1.1	2.1	2.39	2.75	2.71	<1.0	1.6	4.15
Molybdenum	75	57.6	52.6	54.8	54.4	47.0	52.1	49.4	50.7	38.6	36.9	37.8	46.6
Nickel	420	70.6	65.0	59.7	75.1	69.9	68.2	65.4	60.7	51.0	56.2	53.6	64.6
Selenium	100	8.28	12.29	7	<22.4	<23.2	9.9	9.32	10.49	14.45		14.45	12.65
Silver					8.1	5.8	7.0				8.6	8.6	
Zinc	2800	1568.2	1477.8	1288.3	1460	1350	1366.1	1448.7	1625.3	1339.9	1460	1400.0	1840.9
Phenols (T)					25.6						22.1		
PCBs	4	<0.54	<1.47	<1.46		<0.17	<1.46	<1.41	<0.59	<1.57		<1.57	<1.6

## Sludge Monitoring Data (mg/kg dry weight)

		503	Quarterly	8/13/2009	503	Form U	9/2/2009	503	503	Quarterly	11/4/2009	503	Extra
		Analysis	Testing	Average	Analysis		Average	Analysis	Analysis	Testing	Average	Analysis	Analysis
Date	Goal	8/13/2009	8/13/2009	8/13/2009	9/1/2009	9/2/2009	9/2/2009	10/14/2009	11/3/2009	11/4/2009	11/4/2009	12/2/2009	12/8/2009
Arsenic	41	3.36	<8.8	3.9	2.69	<9.0	3.6	3.36	3.31	<9.5	4.0	2.31	
Cadmium	39	4.96	3.6	4.3	4.32	4.8	4.6	5.05	4.05	3.6	3.8	3.58	
Chromium		143.3	108	125.7	124.9	130	127.5	298.4	165.2	128	146.6	112.5	110
Copper	1500	536.7	377	456.9	500.1	577	538.6	572.2	541.4	467	504.2	531.1	
Cyanide (T)			1.9	1.9						7.4	7.4		
Cyanide (free)			<1.2	<1.2						<1.3	<1.3		
Lead	300	143.2	110	126.6	140.8	144	142.4	611.9	283.1	256	269.6	175.4	166
Mercury	17	4.17	3.0	3.6	3.20	2.6	2.9	3.62	3.10	5.1	4.1	2.45	
Molybdenum	75	48.8	36.2	42.5	40.2	46.3	43.3	61.2	50.2	43.2	46.7	51.2	
Nickel	420	95.2	81.7	88.5	63.3	75.5	69.4	66.6	57.3	53.5	55.4	46.8	
Selenium	100	7.33		7.33	7.96	<22.4	9.6	11.85	8.1		8.1	10.79	
Silver			6.9	6.9		8.8	8.8			13.6	13.6		
Zinc	2800	1426.8	1070	1248.4	1510.2	1520	1515.1	1963.0	1676.4	1280	1478.2	1487.8	
Phenols (T)			12.3							14.6			
PCBs	4	<1.29		<1.29	<1.23	<0.15	<1.23	<0.55	<0.55		<0.55	<0.31	

There is a discrepancy in dates for the September and November samples on the laboratory reports. Both the September sample and the November sample is a single composite sample sent for two different analyses. The correct date is in the average column.



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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

## ANALYTICAL RESULTS

Workorder: 9778204 09-1951,1952,1953,1967

Lab ID: 9778204001

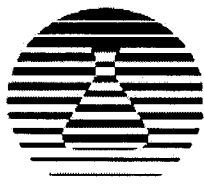
Date Collected: 3/3/2009 08:35

Matrix: Waste Water

Sample ID: Raw Inf 09-1951

Date Received: 3/4/2009 17:33

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
<b>SEMIVOLATILES</b>										
Acenaphthene	ND		ug/L	1.7	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Acenaphthylene	ND		ug/L	1.7	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Anthracene	ND		ug/L	1.7	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Benzidine	ND		ug/L	33.7	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Benzo(a)anthracene	ND		ug/L	1.7	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Benzo(a)pyrene	ND		ug/L	1.7	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Benzo(b)fluoranthene	ND		ug/L	1.7	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Benzo(g,h,i)perylene	ND		ug/L	1.7	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Benzo(k)fluoranthene	ND		ug/L	1.7	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
4-Bromophenyl-phenylether	ND		ug/L	3.4	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Butylbenzylphthalate	ND		ug/L	3.4	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
4-Chloro-3-methylphenol	ND		ug/L	9.0	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Bis(2-Chloroethoxy)methane	ND		ug/L	3.4	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Bis(2-Chloroethyl)ether	ND		ug/L	3.4	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
bis(2-Chloroisopropyl)ether	ND		ug/L	3.4	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
2-Chloronaphthalene	ND		ug/L	3.4	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
2-Chlorophenol	ND		ug/L	9.0	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
4-Chlorophenyl-phenylether	ND		ug/L	3.4	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Chrysene	ND		ug/L	1.7	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Di-n-Butylphthalate	ND		ug/L	3.4	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Di-n-Octylphthalate	ND		ug/L	9.0	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Dibenzo(a,h)anthracene	ND		ug/L	1.7	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
3,3-Dichlorobenzidine	ND		ug/L	9.0	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
2,4-Dichlorophenol	ND		ug/L	9.0	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Diethylphthalate	ND		ug/L	9.0	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
2,4-Dimethylphenol	ND		ug/L	9.0	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Dimethylphthalate	ND		ug/L	9.0	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
2,4-Dinitrophenol	ND		ug/L	18.0	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
2,4-Dinitrotoluene	ND		ug/L	3.4	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
2,6-Dinitrotoluene	ND		ug/L	3.4	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
1,2 Diphenylhydrazine	ND		ug/L	3.4	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
bis(2-Ethylhexyl)phthalate	44.5		ug/L	3.4	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Fluoranthene	ND		ug/L	1.7	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Fluorene	ND		ug/L	1.7	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Hexachlorobenzene	ND		ug/L	3.4	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Hexachlorobutadiene	ND		ug/L	3.4	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Hexachlorocyclopentadiene	ND		ug/L	9.0	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Hexachloroethane	ND		ug/L	3.4	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Indeno(1,2,3-cd)pyrene	ND		ug/L	1.7	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Isophorone	ND		ug/L	3.4	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
2-Methyl-4,6-dinitrophenol	ND		ug/L	9.0	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Naphthalene	ND		ug/L	1.7	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Nitrobenzene	ND		ug/L	3.4	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
2-Nitrophenol	ND		ug/L	9.0	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
4-Nitrophenol	ND		ug/L	9.0	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
N-Nitrosodimethylamine	ND		ug/L	3.4	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1



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## ANALYTICAL RESULTS

Workorder: 9778204 09-1951,1952,1953,1967

Lab ID: **9778204001**  
Sample ID: **Raw Inf 09-1951**

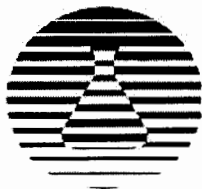
Date Collected: 3/3/2009 08:35  
Date Received: 3/4/2009 17:33

Matrix: Waste Water

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
N-Nitroso-di-n-propylamine	ND		ug/L	3.4	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
N-Nitrosodiphenylamine	ND		ug/L	3.4	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Pentachlorophenol	ND		ug/L	9.0	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Phenanthrene	ND		ug/L	1.7	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Phenol	10.6		ug/L	9.0	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Pyrene	ND		ug/L	1.7	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
1,2,4-Trichlorobenzene	ND		ug/L	3.4	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
2,4,6-Trichlorophenol	ND		ug/L	9.0	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
2,4,6-Tribromophenol (S)	106		%	38-134	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
2-Fluorobiphenyl (S)	79.2		%	37-113	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
2-Fluorophenol (S)	43.6		%	17-73	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Phenol-d5 (S)	35		%	11-53	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Terphenyl-d14 (S)	88.6		%	33-125	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1
Nitrobenzene-d5 (S)	77.4		%	37-124	EPA 625	3/6/09	KMC	3/11/09 05:09	DHF	E1

### Pesticides and PCBs

Aldrin	ND		ug/L	0.055	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
alpha-BHC	ND		ug/L	0.055	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
beta-BHC	ND		ug/L	0.055	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
delta-BHC	ND		ug/L	0.055	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
gamma-BHC	ND		ug/L	0.055	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
Chlordane	ND		ug/L	1.1	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
4,4'-DDD	ND		ug/L	0.055	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
4,4'-DDE	ND		ug/L	0.055	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
4,4'-DDT	ND		ug/L	0.055	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
Dieldrin	ND		ug/L	0.055	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
Endosulfan I	ND		ug/L	0.055	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
Endosulfan II	ND		ug/L	0.055	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
Endosulfan Sulfate	ND		ug/L	0.055	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
Endrin	ND		ug/L	0.055	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
Endrin Aldehyde	ND		ug/L	0.055	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
Heptachlor	ND		ug/L	0.055	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
Heptachlor Epoxide	ND		ug/L	0.055	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
Mirex	ND		ug/L	0.055	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
Toxaphene	ND		ug/L	2.2	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
Aroclor-1016	ND		ug/L	1.1	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
Aroclor-1221	ND		ug/L	1.1	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
Aroclor-1232	ND		ug/L	1.1	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
Aroclor-1242	ND		ug/L	1.1	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
Aroclor-1248	ND		ug/L	1.1	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
Aroclor-1254	ND		ug/L	1.1	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
Aroclor-1260	ND		ug/L	1.1	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
Decachlorobiphenyl (S)	74.1		%	30-150	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1
Tetrachloro-m-xylene (S)	78.9		%	30-150	EPA 608	3/5/09	RSS	3/9/09 23:26	KJH	D1



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**ANALYTICAL RESULTS**

Workorder: 9778204 09-1951,1952,1953,1967

Lab ID: **9778204001**  
Sample ID: **Raw Inf 09-1951**

Date Collected: 3/3/2009 08:35  
Date Received: 3/4/2009 17:33

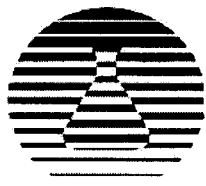
Matrix: Waste Water

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
<b>WET CHEMISTRY</b>									
Phosphorus, Total	10.4		mg/L	0.50	EPA 365.1	3/5/09 TMY	3/9/09 10:22	KLZ	A1
<b>METALS</b>									
Antimony, Total	ND		mg/L	0.010	EPA 200.7	3/6/09 MNP	3/11/09 09:58	JWK	B1
Arsenic, Total	ND		mg/L	0.0050	EPA 200.7	3/6/09 MNP	3/11/09 09:58	JWK	B1
Beryllium, Total	ND		mg/L	0.0020	EPA 200.7	3/6/09 MNP	3/11/09 09:58	JWK	B1
Cadmium, Total	0.0014		mg/L	0.0010	EPA 200.7	3/6/09 MNP	3/11/09 09:58	JWK	B1
Chromium, Total	0.028		mg/L	0.0025	EPA 200.7	3/6/09 MNP	3/11/09 09:58	JWK	B1
Copper, Total	0.12		mg/L	0.0050	EPA 200.7	3/6/09 MNP	3/11/09 09:58	JWK	B1
Lead, Total	0.024		mg/L	0.0030	EPA 200.7	3/6/09 MNP	3/11/09 09:58	JWK	B1
Mercury, Total (XLow-level)	0.0003	1,	mg/L	0.00007	EPA 245.1	3/13/09 BLB	3/13/09 10:20	BLB	B2
Molybdenum, Total	0.034		mg/L	0.010	EPA 200.7	3/6/09 MNP	3/11/09 09:58	JWK	B1
Nickel, Total	0.062		mg/L	0.010	EPA 200.7	3/6/09 MNP	3/11/09 09:58	JWK	B1
Selenium, Total	ND		mg/L	0.010	EPA 200.7	3/6/09 MNP	3/11/09 09:58	JWK	B1
Silver, Total	0.0026		mg/L	0.0020	EPA 200.7	3/6/09 MNP	3/11/09 09:58	JWK	B1
Thallium, Total	ND		mg/L	0.010	EPA 200.7	3/6/09 MNP	3/11/09 09:58	JWK	B1
Zinc, Total	0.42		mg/L	0.010	EPA 200.7	3/6/09 MNP	3/11/09 09:58	JWK	B1

**Sample Comments:**

The recovery of Benzidine was below QC criteria in the 625 LCS associated with this sample.

  
Anna G Milliken  
Laboratory Manager



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## ANALYTICAL RESULTS

Workorder: 9778204 09-1951,1952,1953,1967

Lab ID: 9778204002

Date Collected: 3/4/2009 08:36

Matrix: Waste Water

Sample ID: Raw Inf 09-1952

Date Received: 3/4/2009 17:33

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
<b>VOLATILE ORGANICS</b>									
Acrolein	ND		ug/L	125	EPA 624		3/7/09 06:24	DD	F
Acrylonitrile	ND		ug/L	25.0	EPA 624		3/7/09 06:24	DD	F
Benzene	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
Bromodichloromethane	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
Bromoform	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
Bromomethane	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
Carbon Tetrachloride	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
Chlorobenzene	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
Chlorodibromomethane	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
Chloroethane	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
2-Chloroethylvinyl ether	ND		ug/L	15.0	EPA 624		3/7/09 06:24	DD	F
Chloroform	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
Chloromethane	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
1,1-Dichloroethane	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
1,2-Dichloroethane	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
1,1-Dichloroethene	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
trans-1,2-Dichloroethene	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
1,2-Dichloropropane	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
cis-1,3-Dichloropropene	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
trans-1,3-Dichloropropene	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
1,3-Dichloropropene, Total	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
Ethylbenzene	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
Methylene Chloride	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
Tetrachloroethene	ND		ug/L	4.0	EPA 624		3/7/09 06:24	DD	F
Toluene	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
1,1,1-Trichloroethane	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
1,1,2-Trichloroethane	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
Trichloroethene	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
Vinyl Chloride	ND		ug/L	5.0	EPA 624		3/7/09 06:24	DD	F
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichloroethane-d4 (S)	85.7		%	72-142	EPA 624		3/7/09 06:24	DD	F
4-Bromofluorobenzene (S)	82.3		%	73-119	EPA 624		3/7/09 06:24	DD	F
Dibromofluoromethane (S)	81.9		%	74-132	EPA 624		3/7/09 06:24	DD	F
Toluene-d8 (S)	97.3		%	75-133	EPA 624		3/7/09 06:24	DD	F

## WET CHEMISTRY

Cyanide, Total	0.0060		mg/L	0.0050	335.3/335.4	3/6/09	KLZ	3/6/09 14:38	KLZ	A1
Cyanide, Weak/Dissociable (Free)	ND		mg/L	0.0050	SM20-4500CNI	3/11/09	KEP	3/12/09 07:18	KRK	A2
Oil/Grease Hexane Extractable	ND		mg/L	2.2	EPA 1664			3/13/09 01:00	JJS	D
Phenolics	0.08		mg/L	0.02	420.2/420.4	3/5/09	KRK	3/5/09 11:39	KEP	C



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ANALYTICAL RESULTS

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Workorder: 9778204 09-1951,1952,1953,1967

Lab ID: 9778204002

Date Collected: 3/4/2009 08:36

Matrix: Waste Water

Sample ID: Raw Inf 09-1952

Date Received: 3/4/2009 17:33

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed By	Cntr
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**Sample Comments:**

The reporting limits for GCMS volatile analytes were raised due to the dilution of the sample caused by matrix.

  
Anna G Milliken  
Laboratory Manager



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ANALYTICAL RESULTS

Workorder 9792534 09-4945/4951/4938/4952

Lab ID: 9792534001

Date Collected: 6/2/2009 08:35

Matrix: Waste Water

Sample ID: raw Inf 09-4945

Date Received: 6/3/2009 16:41

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
<b>WET CHEMISTRY</b>										
Phosphorus, Total	8.2		mg/L	0.50	EPA 365.1	6/7/09	KRK	6/9/09 10:02	KEP	C1
<b>METALS</b>										
Arsenic, Total	ND		mg/L	0.0050	EPA 200.7	6/4/09	BMS	6/8/09 16:35	JWK	A1
Cadmium, Total	0.0012		mg/L	0.0010	EPA 200.7	6/4/09	BMS	6/8/09 16:35	JWK	A1
Chromium, Total	0.019		mg/L	0.0025	EPA 200.7	6/4/09	BMS	6/8/09 16:35	JWK	A1
Copper, Total	0.11		mg/L	0.0050	EPA 200.7	6/4/09	BMS	6/8/09 16:35	JWK	A1
Lead, Total	0.019		mg/L	0.0030	EPA 200.7	6/4/09	BMS	6/8/09 16:35	JWK	A1
Mercury, Total (XLow-level)	0.0002	1	mg/L	0.00007	EPA 245.1	6/10/09	BLB	6/10/09 10:53	BLB	A2
Molybdenum, Total	0.029		mg/L	0.010	EPA 200.7	6/4/09	BMS	6/8/09 16:35	JWK	A1
Nickel, Total	0.035		mg/L	0.010	EPA 200.7	6/4/09	BMS	6/8/09 16:35	JWK	A1
Silver, Total	ND		mg/L	0.0020	EPA 200.7	6/4/09	BMS	6/8/09 16:35	JWK	A1
Zinc, Total	0.37		mg/L	0.010	EPA 200.7	6/4/09	BMS	6/8/09 16:35	JWK	A1

Sample Comments:

Anna G Milliken  
Laboratory Manager



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JUN 19 2009

DEPT. OF PUBLIC WORKS

Workorder 9792534 09-4945/4951/4938/4952

Lab ID: 9792534002

Date Collected: 6/2/2009 10:50

Matrix: Waste Water

Sample ID: raw Inf 09-4951

Date Received: 6/3/2009 16:41

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed By	Cntr
<b>WET CHEMISTRY</b>								
Cyanide, Total	ND		mg/L	0.0050	EPA 335.4	6/9/09 KEP	6/9/09 15:47	KLZ B1
Cyanide, Weak/Dissociable (Free)	ND		mg/L	0.0050	SM20-4500CNI	6/11/09 KRK	6/12/09 04:58	KRK B2
Oil/Grease Hexane Extractable	20.3		mg/L	2.1	EPA 1664		6/9/09 18:30	NLK D
Phenolics	0.04		mg/L	0.02	EPA 420.4	6/8/09 KRK	6/10/09 01:54	KRK A

Sample Comments:

Anna G Milliken  
Laboratory Manager





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## ANALYTICAL RESULTS

AUG 31 2009

DEPT. OF PUBLIC WORKS

Workorder 9804197 09-7280,7281,7292,7293

Lab ID: 9804197001

Date Collected: 8/13/2009 08:32

Matrix: Waste Water

Sample ID: Raw Inf, 09-7280

Date Received: 8/14/2009 16:41

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
<b>SEMIVOLATILES</b>									
Acenaphthene	ND		ug/L	1.4	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Acenaphthylene	ND		ug/L	1.4	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Anthracene	ND		ug/L	1.4	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Benzidine	ND	1	ug/L	28.3	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Benzo(a)anthracene	ND		ug/L	1.4	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Benzo(a)pyrene	ND		ug/L	1.4	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Benzo(b)fluoranthene	ND		ug/L	1.4	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Benzo(g,h,i)perylene	ND		ug/L	1.4	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Benzo(k)fluoranthene	ND		ug/L	1.4	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
4-Bromophenyl-phenylether	ND		ug/L	2.8	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Butylbenzylphthalate	4.8		ug/L	2.8	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
4-Chloro-3-methylphenol	ND		ug/L	7.5	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Bis(2-Chloroethoxy)methane	ND		ug/L	2.8	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Bis(2-Chloroethyl)ether	ND		ug/L	2.8	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Bis(2-Chloroisopropyl)ether	ND		ug/L	2.8	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
1,2-Dichloronaphthalene	ND	2	ug/L	2.8	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
2-Chlorophenol	ND		ug/L	7.5	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
4-Chlorophenyl-phenylether	ND		ug/L	2.8	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Chrysene	ND		ug/L	1.4	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Di-n-Butylphthalate	6.0		ug/L	2.8	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Di-n-Octylphthalate	ND		ug/L	7.5	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Dibenzo(a,h)anthracene	ND		ug/L	1.4	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
3,3-Dichlorobenzidine	ND		ug/L	7.5	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
2,4-Dichlorophenol	ND		ug/L	7.5	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Diethylphthalate	ND		ug/L	7.5	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
2,4-Dimethylphenol	ND		ug/L	7.5	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Dimethylphthalate	ND		ug/L	7.5	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
2,4-Dinitrophenol	ND		ug/L	15.1	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
2,4-Dinitrotoluene	ND		ug/L	2.8	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
2,6-Dinitrotoluene	ND		ug/L	7.5	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
1,2-Diphenylhydrazine	ND		ug/L	2.8	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
bis(2-Ethylhexyl)phthalate	20.8		ug/L	2.8	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Fluoranthene	ND		ug/L	1.4	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Fluorene	ND		ug/L	1.4	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Hexachlorobenzene	ND		ug/L	2.8	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Hexachlorobutadiene	ND		ug/L	2.8	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Hexachlorocyclopentadiene	ND		ug/L	7.5	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Hexachloroethane	ND		ug/L	2.8	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Indeno(1,2,3-cd)pyrene	ND		ug/L	1.4	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Isophorone	ND		ug/L	2.8	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
2-Methyl-4,6-dinitrophenol	ND		ug/L	7.5	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Naphthalene	ND		ug/L	1.4	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
Nitrobenzene	ND		ug/L	2.8	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
2-Nitrophenol	ND		ug/L	7.5	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
4-Nitrophenol	ND		ug/L	7.5	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1
N-Nitrosodimethylamine	ND		ug/L	2.8	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF A1



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## ANALYTICAL RESULTS

AUG 31 2009

DEPT. OF PUBLIC WORKS

Workorder 9804197 09-7280,7281,7292,7293

Lab ID: 9804197001  
Sample ID: Raw Inf, 09-7280

Date Collected: 8/13/2009 08:32  
Date Received: 8/14/2009 16:41  
Matrix: Waste Water

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
N-Nitroso-di-n-propylamine	ND		ug/L	2.8	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF	A1
N-Nitrosodiphenylamine	ND		ug/L	2.8	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF	A1
Pentachlorophenol	ND		ug/L	15.1	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF	A1
Phenanthrene	ND		ug/L	1.4	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF	A1
Phenol	ND		ug/L	7.5	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF	A1
Pyrene	ND		ug/L	1.4	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF	A1
1,2,4-Trichlorobenzene	ND		ug/L	2.8	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF	A1
2,4,6-Trichlorophenol	ND		ug/L	7.5	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF	A1
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
2,4,6-Tribromophenol (S)	62.7		%	38-134	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF	A1
2-Fluorobiphenyl (S)	66.8		%	37-113	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF	A1
2-Fluorophenol (S)	38.7		%	17-73	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF	A1
Nitrobenzene-d5 (S)	87.8		%	37-124	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF	A1
Phenol-d5 (S)	29.4		%	11-53	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF	A1
Terphenyl-d14 (S)	66.9		%	33-125	EPA 625	8/19/09	RSS	8/25/09 18:29	DHF	A1
<b>WEI CHEMISTRY</b>										
Phosphorus, Total	5.4		mg/L	0.50	EPA 365.1	8/17/09	KLZ	8/19/09 04:48	KRK	B1
<b>METALS</b>										
Mercury, Total (XLow-level)	0.0002		mg/L	0.00007	EPA 245.1	8/20/09	BLB	8/20/09 11:36	BLB	C2
Arsenic, Total	ND		mg/L	0.0050	EPA 200.7	8/18/09	MNP	8/20/09 11:04	JWK	C1
Cadmium, Total	ND		mg/L	0.0010	EPA 200.7	8/18/09	MNP	8/20/09 11:04	JWK	C1
Chromium, Total	0.021		mg/L	0.0025	EPA 200.7	8/18/09	MNP	8/20/09 11:04	JWK	C1
Copper, Total	0.086		mg/L	0.0050	EPA 200.7	8/18/09	MNP	8/20/09 11:04	JWK	C1
Lead, Total	0.017		mg/L	0.0030	EPA 200.7	8/18/09	MNP	8/20/09 11:04	JWK	C1
Molybdenum, Total	0.029		mg/L	0.010	EPA 200.7	8/18/09	MNP	8/20/09 11:04	JWK	C1
Nickel, Total	ND		mg/L	0.010	EPA 200.7	8/18/09	MNP	8/20/09 11:04	JWK	C1
Silver, Total	ND		mg/L	0.0020	EPA 200.7	8/18/09	MNP	8/20/09 11:04	JWK	C1
Zinc, Total	0.30		mg/L	0.010	EPA 200.7	8/18/09	MNP	8/20/09 11:04	JWK	C1

### Sample Comments:

*Anna G Milliken*  
Anna G Milliken  
Laboratory Manager



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ANALYTICAL RESULTS  
DEPT. OF PUBLIC WORKS

Workorder 9804197 09-7280,7281,7292,7293

Lab ID: 9804197002

Date Collected: 8/14/2009 08:25

Matrix: Waste Water

Sample ID: Raw Inf, 09-7281

Date Received: 8/14/2009 16:41

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed By	Cntr
<b>WET CHEMISTRY</b>								
Cyanide, Total	ND		mg/L	0.0050	EPA 335.4	8/19/09 KEP	8/20/09 10:44 KEP	D2
Cyanide, Weak/Dissociable(Free)	ND		mg/L	0.0050	SM20-4500CNI	8/17/09 TMY	8/18/09 13:23 KLZ	D1
Oil/Grease Hexane Extractable	9.9		mg/L	2.1	EPA 1664		8/21/09 18:30 NLK	A
Phenolics	0.04		mg/L	0.01	EPA 420.4	8/18/09 KRK	8/19/09 10:31 KLZ	C

Sample Comments:

  
Anna G Milliken  
Laboratory Manager



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## ANALYTICAL RESULTS

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DEPT. OF PUBLIC WORKS

Workorder 9817556 09-9949/53/62/63/67/65

Lab ID: 9817556001

Date Collected: 11/4/2009 08:47

Waste Water

Sample ID: Raw Inf 09-9949

Date Received: 11/6/2009 19:30

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed By	Cntr
<b>SEMIVOLATILES</b>								
bis(2-Ethylhexyl)phthalate	32.9		ug/L	2.9	EPA 625	11/10/09 CAC	11/11/09 21:42 CGS	A1
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared By	Analyzed By	Cntr
2,4,6-Tribromophenol (S)	46.7		%	38-134	EPA 625	11/10/09 CAC	11/11/09 21:42 CGS	A1
2-Fluorobiphenyl (S)	85.7		%	37-113	EPA 625	11/10/09 CAC	11/11/09 21:42 CGS	A1
2-Fluorophenol (S)	28.4		%	17-73	EPA 625	11/10/09 CAC	11/11/09 21:42 CGS	A1
Nitrobenzene-d5 (S)	82.8		%	37-124	EPA 625	11/10/09 CAC	11/11/09 21:42 CGS	A1
Phenol-d5 (S)	22.9		%	11-53	EPA 625	11/10/09 CAC	11/11/09 21:42 CGS	A1
Terphenyl-d14 (S)	250		%	33-125	EPA 625	11/10/09 CAC	11/11/09 21:42 CGS	A1
<b>WET CHEMISTRY</b>								
Phosphorus, Total	8.7		mg/L	0.50	EPA 365.1	11/11/09 KRK	11/13/09 05:22 KRK	B1
<b>METALS</b>								
Mercury, Total (XLow-level)	0.0007		mg/L	0.0001	EPA 245.1	11/11/09 BLB	11/11/09 08:58 BLB	C1
Arctic, Total	ND		mg/L	0.0050	EPA 200.7	11/12/09 SRT	11/17/09 07:43 JWK	C2
Cadmium, Total	0.0018		mg/L	0.0010	EPA 200.7	11/12/09 SRT	11/17/09 07:43 JWK	C2
Chromium, Total	0.040		mg/L	0.0025	EPA 200.7	11/12/09 SRT	11/17/09 07:43 JWK	C2
Copper, Total	0.22		mg/L	0.0050	EPA 200.7	11/12/09 SRT	11/17/09 07:43 JWK	C2
Lead, Total	0.092		mg/L	0.0030	EPA 200.7	11/12/09 SRT	11/17/09 07:43 JWK	C2
Molybdenum, Total	0.062		mg/L	0.010	EPA 200.7	11/12/09 SRT	11/17/09 07:43 JWK	C2
Nickel, Total	0.022		mg/L	0.010	EPA 200.7	11/12/09 SRT	11/17/09 07:43 JWK	C2
Silver, Total	0.0047		mg/L	0.0020	EPA 200.7	11/12/09 SRT	11/17/09 07:43 JWK	C2
Zinc, Total	0.69		mg/L	0.010	EPA 200.7	11/12/09 SRT	11/17/09 07:43 JWK	C2

### Sample Comments:

Matrix interferences were present in this sample which caused one or more surrogates to be recovered outside of the laboratory established control limits for the GC/MS analysis.

Anna G Milliken  
Laboratory Manager



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Workorder 9817556 09-9949/53/62/63/67/65

Lab ID: 9817556002

Date Collected: 11/5/2009 08:52

Matrix: Waste Water

Sample ID: Raw Inf 09-9953

Date Received: 11/6/2009 19:30

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed By	Cntr
WET CHEMISTRY								
Cyanide, Total	ND		mg/L	0.0050	EPA 335.4	11/9/09 KEP	11/9/09 14:42 KEP	D1
Cyanide, Weak/Dissociable (Free)	0.0050	1	mg/L	0.0050	SM20-4500CNI	11/11/09 KLR	11/11/09 14:45 KLR	D2
Oil/Grease Hexane Extractable	29.6		mg/L	2.0	EPA 1664		11/16/09 11:00 ELT	A
Phenolics	0.04		mg/L	0.01	EPA 420.4	11/12/09 KRK	11/12/09 10:01 KEP	C

Sample Comments:

  
Anna G Milliken  
Laboratory Manager



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## ANALYTICAL RESULTS

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MAR 18 2009  
DEPT. OF PUBLIC WORKS

Workorder 9778204 09-1951,1952,1953,1967

Lab ID: 9778204003

Date Collected: 3/3/2009 09:15

Matrix: Waste Water

Sample ID: Final Eff 09-1963

Date Received: 3/4/2009 17:33

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
<b>SEMIVOLATILES</b>									
Acenaphthene	ND		ug/L	1.6	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Acenaphthylene	ND		ug/L	1.6	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Anthracene	ND		ug/L	1.6	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Benzidine	ND		ug/L	31.1	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Benzo(a)anthracene	ND		ug/L	1.6	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Benzo(a)pyrene	ND		ug/L	1.6	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Benzo(b)fluoranthene	ND		ug/L	1.6	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Benzo(g,h,i)perylene	ND		ug/L	1.6	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Benzo(k)fluoranthene	ND		ug/L	1.6	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
4-Bromophenyl-phenylether	ND		ug/L	3.1	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Butylbenzylphthalate	ND		ug/L	3.1	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
4-Chloro-3-methylphenol	ND		ug/L	8.3	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Bis(2-Chloroethoxy)methane	ND		ug/L	3.1	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Bis(2-Chloroethyl)ether	ND		ug/L	3.1	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
bis(2-Chloroisopropyl)ether	ND		ug/L	3.1	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
2-Chloronaphthalene	ND		ug/L	3.1	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
2-Chlorophenol	ND		ug/L	8.3	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
4-Chlorophenyl-phenylether	ND		ug/L	3.1	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Chrysene	ND		ug/L	1.6	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Di-n-Butylphthalate	ND		ug/L	3.1	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Di-n-Octylphthalate	ND		ug/L	8.3	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Dibenzo(a,h)anthracene	ND		ug/L	1.6	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
3,3-Dichlorobenzidine	ND		ug/L	8.3	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
2,4-Dichlorophenol	ND		ug/L	8.3	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Diethylphthalate	ND		ug/L	8.3	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
2,4-Dimethylphenol	ND		ug/L	8.3	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Dimethylphthalate	ND		ug/L	8.3	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
2,4-Dinitrophenol	ND		ug/L	16.6	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
2,4-Dinitrotoluene	ND		ug/L	3.1	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
2,6-Dinitrotoluene	ND		ug/L	3.1	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
1,2 Diphenylhydrazine	ND		ug/L	3.1	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
bis(2-Ethylhexyl)phthalate	6.0		ug/L	3.1	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Fluoranthene	ND		ug/L	1.6	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Fluorene	ND		ug/L	1.6	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Hexachlorobenzene	ND		ug/L	3.1	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Hexachlorobutadiene	ND		ug/L	3.1	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Hexachlorocyclopentadiene	ND		ug/L	8.3	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Hexachloroethane	ND		ug/L	3.1	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Indeno(1,2,3-cd)pyrene	ND		ug/L	1.6	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Isophorone	ND		ug/L	3.1	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
2-Methyl-4,6-dinitrophenol	ND		ug/L	8.3	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Naphthalene	ND		ug/L	1.6	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
Nitrobenzene	ND		ug/L	3.1	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
2-Nitrophenol	ND		ug/L	8.3	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
4-Nitrophenol	ND		ug/L	8.3	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1
N-Nitrosodimethylamine	ND		ug/L	3.1	EPA 625	3/6/09 KMC	3/11/09 05:59	DHF	F1



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## ANALYTICAL RESULTS

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MAR 18 2009  
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Workorder 9778204 09-1951,1952,1953,1967

Lab ID: 9778204003

Date Collected: 3/3/2009 09:15

Matrix: Waste Water

Sample ID: Final Eff 09-1963

Date Received: 3/4/2009 17:33

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
N-Nitroso-di-n-propylamine	ND		ug/L	3.1	EPA 625	3/6/09	KMC	3/11/09 05:59	DHF	F1
N-Nitrosodiphenylamine	ND		ug/L	3.1	EPA 625	3/6/09	KMC	3/11/09 05:59	DHF	F1
Pentachlorophenol	ND		ug/L	8.3	EPA 625	3/6/09	KMC	3/11/09 05:59	DHF	F1
Phenanthrene	ND		ug/L	1.6	EPA 625	3/6/09	KMC	3/11/09 05:59	DHF	F1
Phenol	ND		ug/L	8.3	EPA 625	3/6/09	KMC	3/11/09 05:59	DHF	F1
Pyrene	ND		ug/L	1.6	EPA 625	3/6/09	KMC	3/11/09 05:59	DHF	F1
1,2,4-Trichlorobenzene	ND		ug/L	3.1	EPA 625	3/6/09	KMC	3/11/09 05:59	DHF	F1
2,4,6-Trichlorophenol	ND		ug/L	8.3	EPA 625	3/6/09	KMC	3/11/09 05:59	DHF	F1
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
2,4,6-Tribromophenol (S)	92.6		%	38-134	EPA 625	3/6/09	KMC	3/11/09 05:59	DHF	F1
2-Fluorobiphenyl (S)	63.5		%	37-113	EPA 625	3/6/09	KMC	3/11/09 05:59	DHF	F1
Nitrobenzene-d5 (S)	66.7		%	37-124	EPA 625	3/6/09	KMC	3/11/09 05:59	DHF	F1
Phenol-d5 (S)	26.8		%	11-53	EPA 625	3/6/09	KMC	3/11/09 05:59	DHF	F1
Terphenyl-d14 (S)	53.9		%	33-125	EPA 625	3/6/09	KMC	3/11/09 05:59	DHF	F1
2-Fluorophenol (S)	40.5		%	17-73	EPA 625	3/6/09	KMC	3/11/09 05:59	DHF	F1

### Pesticides and PCBs

Aldrin	ND		ug/L	0.051	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
alpha-BHC	ND		ug/L	0.051	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
beta-BHC	ND		ug/L	0.051	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
delta-BHC	ND		ug/L	0.051	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
gamma-BHC	ND		ug/L	0.051	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
Chlordane	ND		ug/L	1.0	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
4,4'-DDD	ND		ug/L	0.051	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
4,4'-DDE	ND		ug/L	0.051	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
4,4'-DDT	ND		ug/L	0.051	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
Dieldrin	ND		ug/L	0.051	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
Endosulfan I	ND		ug/L	0.051	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
Endosulfan II	ND		ug/L	0.051	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
Endosulfan Sulfate	ND		ug/L	0.051	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
Endrin	ND		ug/L	0.051	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
Endrin Aldehyde	ND		ug/L	0.051	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
Heptachlor	ND		ug/L	0.051	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
Heptachlor Epoxide	ND		ug/L	0.051	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
Mirex	ND		ug/L	0.051	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
Toxaphene	ND		ug/L	2.0	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
Aroclor-1016	ND		ug/L	1.0	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
Aroclor-1221	ND		ug/L	1.0	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
Aroclor-1232	ND		ug/L	1.0	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
Aroclor-1242	ND		ug/L	1.0	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
Aroclor-1248	ND		ug/L	1.0	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
Aroclor-1254	ND		ug/L	1.0	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
Aroclor-1260	ND		ug/L	1.0	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
Decachlorobiphenyl (S)	78.6		%	30-150	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1
Tetrachloro-m-xylene (S)	67		%	30-150	EPA 608	3/5/09	RSS	3/9/09 23:58	KJH	D1



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**ANALYTICAL RESULTS**

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Workorder 9778204 09-1951,1952,1953,1967

Lab ID: 9778204003

Date Collected: 3/3/2009 09:15

Matrix: Waste Water

Sample ID: Final Eff 09-1963

Date Received: 3/4/2009 17:33

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
<b>WET CHEMISTRY</b>									
Phosphorus, Total	4.1		mg/L	0.20	EPA 365.1	3/5/09 TMY	3/9/09 10:22	KLZ	A1
<b>METALS</b>									
Antimony, Total	ND		mg/L	0.010	EPA 200.7	3/6/09 MNP	3/11/09 10:03	JWK	B1
Arsenic, Total	ND		mg/L	0.0050	EPA 200.7	3/6/09 MNP	3/11/09 10:03	JWK	B1
Beryllium, Total	ND		mg/L	0.0020	EPA 200.7	3/6/09 MNP	3/11/09 10:03	JWK	B1
Cadmium, Total	ND		mg/L	0.0010	EPA 200.7	3/6/09 MNP	3/11/09 10:03	JWK	B1
Chromium, Total	0.0034		mg/L	0.0025	EPA 200.7	3/6/09 MNP	3/11/09 10:03	JWK	B1
Copper, Total	0.018		mg/L	0.0050	EPA 200.7	3/6/09 MNP	3/11/09 10:03	JWK	B1
Lead, Total	ND		mg/L	0.0030	EPA 200.7	3/6/09 MNP	3/11/09 10:03	JWK	B1
Mercury, Total (XLow-level)	ND		mg/L	0.00007	EPA 245.1	3/13/09 BLB	3/13/09 10:29	BLB	B2
Molybdenum, Total	0.028		mg/L	0.010	EPA 200.7	3/6/09 MNP	3/11/09 10:03	JWK	B1
Nickel, Total	0.011		mg/L	0.010	EPA 200.7	3/6/09 MNP	3/11/09 10:03	JWK	B1
Selenium, Total	ND		mg/L	0.010	EPA 200.7	3/6/09 MNP	3/11/09 10:03	JWK	B1
Silver, Total	ND		mg/L	0.0020	EPA 200.7	3/6/09 MNP	3/11/09 10:03	JWK	B1
Thallium, Total	ND		mg/L	0.010	EPA 200.7	3/6/09 MNP	3/11/09 10:03	JWK	B1
Zinc, Total	0.092		mg/L	0.010	EPA 200.7	3/6/09 MNP	3/11/09 10:03	JWK	B1

**Sample Comments:**

The recovery of Benzidine was below QC criteria in the 625 LCS associated with this sample.

  
Anna G Milliken  
Laboratory Manager





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## ANALYTICAL RESULTS

Workorder 9778204 09-1951,1952,1953,1967

Lab ID: 9778204004

Date Collected: 3/4/2009 09:15

Matrix: Waste Water

Sample ID: Final Eff 09-1967

Date Received: 3/4/2009 17:33

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
<b>VOLATILE ORGANICS</b>									
Acrolein	ND		ug/L	25.0	EPA 624		3/7/09 05:50	DD	F
Acrylonitrile	ND		ug/L	5.0	EPA 624		3/7/09 05:50	DD	F
Benzene	ND		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
Bromodichloromethane	ND		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
Bromoform	ND		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
Bromomethane	ND		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
Carbon Tetrachloride	ND		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
Chlorobenzene	ND		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
Chlorodibromomethane	ND		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
Chloroethane	ND		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
2-Chloroethylvinyl ether	ND		ug/L	3.0	EPA 624		3/7/09 05:50	DD	F
Chloroform	ND		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
Chloromethane	ND		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
1,1-Dichloroethane	ND		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
1,2-Dichloroethane	ND		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
1,1-chloroethene	ND		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
trans-1,2-Dichloroethene	ND		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
1,2-Dichloropropane	ND		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
cis-1,3-Dichloropropene	ND		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
trans-1,3-Dichloropropene	ND		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
1,3-Dichloropropene, Total	ND		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
Ethylbenzene	ND		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
Methylene Chloride	ND		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
Tetrachloroethene	ND		ug/L	0.80	EPA 624		3/7/09 05:50	DD	F
Toluene	1.3		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
1,1,1-Trichloroethane	ND		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
1,1,2-Trichloroethane	ND		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
Trichloroethene	ND		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
Vinyl Chloride	ND		ug/L	1.0	EPA 624		3/7/09 05:50	DD	F
<b>Surrogate Recoveries</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>Limits</b>	<b>Method</b>	<b>Prepared By</b>	<b>Analyzed</b>	<b>By</b>	<b>Cntr</b>
1,2-Dichloroethane-d4 (S)	85.1		%	72-142	EPA 624		3/7/09 05:50	DD	F
4-Bromofluorobenzene (S)	82.8		%	73-119	EPA 624		3/7/09 05:50	DD	F
Dibromofluoromethane (S)	81.8		%	74-132	EPA 624		3/7/09 05:50	DD	F
Toluene-d8 (S)	96.6		%	75-133	EPA 624		3/7/09 05:50	DD	F

## WET CHEMISTRY

Cyanide, Total	0.0070		mg/L	0.0050	335.3/335.4	3/6/09	KLZ	3/6/09 14:38	KLZ	A1
Cyanide, Weak/Dissociable (Free)	ND		mg/L	0.0050	SM20-4500CNI	3/11/09	KEP	3/12/09 07:18	KRK	A2
Oil/Grease Hexane Extractable	ND		mg/L	2.0	EPA 1664			3/12/09 18:00	NLK	D
Phenolics	0.01		mg/L	0.01	420.2/420.4	3/5/09	KRK	3/5/09 13:04	KEP	C



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ANALYTICAL RESULTS

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Workorder 9778204 09-1951,1952,1953,1967

Lab ID: 9778204004

Date Collected: 3/4/2009 09:15

Matrix: Waste Water

Sample ID: Final Eff 09-1967

Date Received: 3/4/2009 17:33

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
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Sample Comments:

Anna G Milliken  
Laboratory Manager



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ANALYTICAL RESULTS QUALIFIERS\FLAGS

Workorder 9778204 09-1951,1952,1953,1967

PARAMETER QUALIFIERS\FLAGS

[1]

The recovery of the Matrix Spike (MS) associated to this analyte was outside of the established control limits. The sample was post-digestion spiked, and this matrix spike was NOT within acceptable recovery limits. Matrix interference may be the cause. LAM 3/13/09

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ANALYTICAL RESULTS

Workorder 9792534 09-4945/4951/4938/4952

Lab ID: 9792534003

Date Collected: 6/2/2009 08:10

Matrix: Waste Water

Sample ID: Final Eff 09-4938

Date Received: 6/3/2009 16:41

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
<b>WET CHEMISTRY</b>									
Phosphorus, Total	3.9		mg/L	0.20	EPA 365.1	6/7/09 KRK	6/9/09 10:02	KEP	C1
<b>METALS</b>									
Arsenic, Total	ND		mg/L	0.0050	EPA 200.7	6/4/09 BMS	6/8/09 16:40	JWK	A1
Cadmium, Total	ND		mg/L	0.0010	EPA 200.7	6/4/09 BMS	6/8/09 16:40	JWK	A1
Chromium, Total	0.0025		mg/L	0.0025	EPA 200.7	6/4/09 BMS	6/8/09 16:40	JWK	A1
Copper, Total	0.018		mg/L	0.0050	EPA 200.7	6/4/09 BMS	6/8/09 16:40	JWK	A1
Lead, Total	ND		mg/L	0.0030	EPA 200.7	6/4/09 BMS	6/8/09 16:40	JWK	A1
Mercury, Total (XLow-level)	ND		mg/L	0.00007	EPA 245.1	6/10/09 BLB	6/10/09 11:03	BLB	A2
Molybdenum, Total	0.021		mg/L	0.010	EPA 200.7	6/4/09 BMS	6/8/09 16:40	JWK	A1
Nickel, Total	0.011		mg/L	0.010	EPA 200.7	6/4/09 BMS	6/8/09 16:40	JWK	A1
Silver, Total	ND		mg/L	0.0020	EPA 200.7	6/4/09 BMS	6/8/09 16:40	JWK	A1
Zinc, Total	0.073		mg/L	0.010	EPA 200.7	6/4/09 BMS	6/8/09 16:40	JWK	A1

Sample Comments:

  
Anna G Milliken  
Laboratory Manager



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Workorder 9792534 09-4945/4951/4938/4952

Lab ID: 9792534004

Date Collected: 6/2/2009 11:06

Matrix: Waste Water

Sample ID: Final Eff 09-4952

Date Received: 6/3/2009 16:41

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
<b>WET CHEMISTRY</b>									
Cyanide, Total	ND		mg/L	0.0050	EPA 335.4	6/9/09 KEP	6/9/09 15:47	KLZ	C1
Cyanide, Weak/Dissociable(Free)	ND		mg/L	0.0050	SM20-4500CNI	6/11/09 KRK	6/12/09 04:58	KRK	C2
Oil/Grease Hexane Extractable	ND		mg/L	2.0	EPA 1664		6/10/09 09:30	DTL	A
Phenolics	ND		mg/L	0.01	EPA 420.4	6/8/09 KRK	6/10/09 01:54	KRK	E

Sample Comments:

  
Anna G Milliken  
Laboratory Manager



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Workorder 9792534 09-4945/4951/4938/4952

PARAMETER QUALIFIERS\FLAGS

[1]

One of the two matrix spike analyses performed on this sample failed to meet acceptable recovery limits. The other matrix spike was within acceptable recovery limits. Matrix interferences are the possible cause for the failure.



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## ANALYTICAL RESULTS

AUG 31 2009

DEPT. OF PUBLIC WORKS

Workorder 9804197 09-7280,7281,7292,7293

Lab ID: 9804197003

Date Collected: 8/13/2009 09:09

Matrix: Waste Water

Sample ID: Final Eff, 09-7292

Date Received: 8/14/2009 16:41

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
<b>SEMIVOLATILES</b>									
Acenaphthene	ND		ug/L	1.4	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Acenaphthylene	ND		ug/L	1.4	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Anthracene	ND		ug/L	1.4	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Benzidine	ND	1	ug/L	28.6	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Benzo(a)anthracene	ND		ug/L	1.4	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Benzo(a)pyrene	ND		ug/L	1.4	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Benzo(b)fluoranthene	ND		ug/L	1.4	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Benzo(g,h,i)perylene	ND		ug/L	1.4	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Benzo(k)fluoranthene	ND		ug/L	1.4	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
4-Bromophenyl-phenylether	ND		ug/L	2.9	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Butylbenzylphthalate	ND		ug/L	2.9	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
4-Chloro-3-methylphenol	ND		ug/L	7.6	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Bis(2-Chloroethoxy)methane	ND		ug/L	2.9	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Bis(2-Chloroethyl)ether	ND		ug/L	2.9	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Bis(2-Chloroisopropyl)ether	ND		ug/L	2.9	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Boronaphthalene	ND	2	ug/L	2.9	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
2-Chlorophenol	ND		ug/L	7.6	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
4-Chlorophenyl-phenylether	ND		ug/L	2.9	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Chrysene	ND		ug/L	1.4	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Di-n-Butylphthalate	ND		ug/L	2.9	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Di-n-Octylphthalate	ND		ug/L	7.6	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Dibenzo(a,h)anthracene	ND		ug/L	1.4	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
3,3-Dichlorobenzidine	ND		ug/L	7.6	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
2,4-Dichlorophenol	ND		ug/L	7.6	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Diethylphthalate	ND		ug/L	7.6	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
2,4-Dimethylphenol	ND		ug/L	7.6	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Dimethylphthalate	ND		ug/L	7.6	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
2,4-Dinitrophenol	ND		ug/L	15.2	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
2,4-Dinitrotoluene	ND		ug/L	2.9	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
2,6-Dinitrotoluene	ND		ug/L	7.6	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
1,2-Diphenylhydrazine	ND		ug/L	2.9	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
bis(2-Ethylhexyl)phthalate	6.9		ug/L	2.9	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Fluoranthene	ND		ug/L	1.4	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Fluorene	ND		ug/L	1.4	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Hexachlorobenzene	ND		ug/L	2.9	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Hexachlorobutadiene	ND		ug/L	2.9	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Hexachlorocyclopentadiene	ND		ug/L	7.6	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Hexachloroethane	ND		ug/L	2.9	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Indeno(1,2,3-cd)pyrene	ND		ug/L	1.4	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Isophorone	ND		ug/L	2.9	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
2-Methyl-4,6-dinitrophenol	ND		ug/L	7.6	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Naphthalene	ND		ug/L	1.4	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
Nitrobenzene	ND		ug/L	2.9	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
2-Nitrophenol	ND		ug/L	7.6	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
4-Nitrophenol	ND		ug/L	7.6	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1
N-Nitrosodimethylamine	ND		ug/L	2.9	EPA 625	8/19/09 RSS	8/25/09 17:39	DHF	A1



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## ANALYTICAL RESULTS

DEF. OF PUBLIC WORKS  
AUG 31 2009

Workorder 9804197 09-7280,7281,7292,7293

Lab ID: 9804197003

Date Collected: 8/13/2009 09:09

Matrix: Waste Water

Sample ID: Final Eff, 09-7292

Date Received: 8/14/2009 16:41

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
N-Nitroso-di-n-propylamine	ND		ug/L	2.9	EPA 625	8/19/09	RSS	8/25/09 17:39	DHF	A1
N-Nitrosodiphenylamine	ND		ug/L	2.9	EPA 625	8/19/09	RSS	8/25/09 17:39	DHF	A1
Pentachlorophenol	ND		ug/L	15.2	EPA 625	8/19/09	RSS	8/25/09 17:39	DHF	A1
Phenanthrene	ND		ug/L	1.4	EPA 625	8/19/09	RSS	8/25/09 17:39	DHF	A1
Phenol	ND		ug/L	7.6	EPA 625	8/19/09	RSS	8/25/09 17:39	DHF	A1
Pyrene	ND		ug/L	1.4	EPA 625	8/19/09	RSS	8/25/09 17:39	DHF	A1
1,2,4-Trichlorobenzene	ND		ug/L	2.9	EPA 625	8/19/09	RSS	8/25/09 17:39	DHF	A1
2,4,6-Trichlorophenol	ND		ug/L	7.6	EPA 625	8/19/09	RSS	8/25/09 17:39	DHF	A1
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
2,4,6-Tribromophenol (S)	54		%	38-134	EPA 625	8/19/09	RSS	8/25/09 17:39	DHF	A1
2-Fluorobiphenyl (S)	97.3		%	37-113	EPA 625	8/19/09	RSS	8/25/09 17:39	DHF	A1
2-Fluorophenol (S)	37.7		%	17-73	EPA 625	8/19/09	RSS	8/25/09 17:39	DHF	A1
Nitrobenzene-d5 (S)	71.8		%	37-124	EPA 625	8/19/09	RSS	8/25/09 17:39	DHF	A1
Phenol-d5 (S)	23.9		%	11-53	EPA 625	8/19/09	RSS	8/25/09 17:39	DHF	A1
Terphenyl-d14 (S)	68.3		%	33-125	EPA 625	8/19/09	RSS	8/25/09 17:39	DHF	A1

### WATER CHEMISTRY

Phosphorus, Total	3.1		mg/L	0.20	EPA 365.1	8/17/09	KLZ	8/19/09 04:48	KRK	B1
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### METALS

Mercury, Total (XLow-level)	ND		mg/L	0.00007	EPA 245.1	8/20/09	BLB	8/20/09 11:39	BLB	C2
Arsenic, Total	ND		mg/L	0.0050	EPA 200.7	8/18/09	MNP	8/20/09 11:09	JWK	C1
Cadmium, Total	ND		mg/L	0.0010	EPA 200.7	8/18/09	MNP	8/20/09 11:09	JWK	C1
Chromium, Total	0.0053		mg/L	0.0025	EPA 200.7	8/18/09	MNP	8/20/09 11:09	JWK	C1
Copper, Total	0.014		mg/L	0.0050	EPA 200.7	8/18/09	MNP	8/20/09 11:09	JWK	C1
Lead, Total	ND		mg/L	0.0030	EPA 200.7	8/18/09	MNP	8/20/09 11:09	JWK	C1
Molybdenum, Total	0.028		mg/L	0.010	EPA 200.7	8/18/09	MNP	8/20/09 11:09	JWK	C1
Nickel, Total	ND		mg/L	0.010	EPA 200.7	8/18/09	MNP	8/20/09 11:09	JWK	C1
Silver, Total	ND		mg/L	0.0020	EPA 200.7	8/18/09	MNP	8/20/09 11:09	JWK	C1
Zinc, Total	0.067		mg/L	0.010	EPA 200.7	8/18/09	MNP	8/20/09 11:09	JWK	C1

### Sample Comments:

  
Anna G Milliken  
Laboratory Manager





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ANALYTICAL RESULTS

AUG 31 2009

DEPT. OF PUBLIC WORKS

Workorder 9804197 09-7280,7281,7292,7293

Lab ID: 9804197004

Date Collected: 8/14/2009 09:15

Matrix: Waste Water

Sample ID: Final Eff, 09-7293

Date Received: 8/14/2009 16:41

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed By	Cntr
<b>WET CHEMISTRY</b>								
Cyanide, Total	ND		mg/L	0.0050	EPA 335.4	8/19/09 KEP	8/20/09 10:44	KEP D2
Cyanide, Weak/Dissociable(Free)	ND		mg/L	0.0050	SM20-4500CNI	8/17/09 TMY	8/18/09 13:23	KLZ D1
Oil/Grease Hexane Extractable	ND	3,4	mg/L	2.0	EPA 1664		8/21/09 18:30	NLK A
Phenolics	ND		mg/L	0.01	EPA 420.4	8/18/09 KRK	8/19/09 10:31	KLZ C

Sample Comments:

  
Anna G Milliken  
Laboratory Manager



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ANALYTICAL RESULTS QUALIFIERS\FLAGS

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Workorder 9804197 09-7280,7281,7292,7293

PARAMETER QUALIFIERS\FLAGS

- [1] The QC sample type LCS for method EPA 625 was outside the control limits for the analyte Benzidine. The % Recovery was reported as 0 and the control limits were 5 to 248.
- [2] The QC sample type LCS for method EPA 625 was outside the control limits for the analyte 2-Chloronaphthalene. The % Recovery was reported as 58.1 and the control limits were 60 to 118.
- [3] The recovery of the Matrix Spike (MS) associated to this analyte was outside of the established control limits.
- [4] Insufficient sample amount to re-run.



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## ANALYTICAL RESULTS

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Workorder 9817556 09-9949/53/62/63/67/65

Lab ID: 9817556003

Date Collected: 11/4/2009 09:13

Matrix: Waste Water

Sample ID: Final Eff 09-9962

Date Received: 11/6/2009 19:30

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed By	Cntr
<b>SEMIVOLATILES</b>								
bis(2-Ethylhexyl)phthalate	5.7		ug/L	2.9	EPA 625	11/10/09 CAC	11/11/09 22:34 CGS	D1
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared By	Analyzed By	Cntr
2,4,6-Tribromophenol (S)	27.1		%	38-134	EPA 625	11/10/09 CAC	11/11/09 22:34 CGS	D1
2-Fluorobiphenyl (S)	93		%	37-113	EPA 625	11/10/09 CAC	11/11/09 22:34 CGS	D1
2-Fluorophenol (S)	31.9		%	17-73	EPA 625	11/10/09 CAC	11/11/09 22:34 CGS	D1
Nitrobenzene-d5 (S)	90.2		%	37-124	EPA 625	11/10/09 CAC	11/11/09 22:34 CGS	D1
Phenol-d5 (S)	21.8		%	11-53	EPA 625	11/10/09 CAC	11/11/09 22:34 CGS	D1
Terphenyl-d14 (S)	62.2		%	33-125	EPA 625	11/10/09 CAC	11/11/09 22:34 CGS	D1
<b>WET CHEMISTRY</b>								
Phosphorus, Total	3.5		mg/L	0.50	EPA 365.1	11/11/09 KRK	11/11/09 08:51 KLR	A1
<b>METALS</b>								
Arctic, Total	ND		mg/L	0.0050	EPA 200.7	11/9/09 MNP	11/10/09 13:51 JWK	B1
Cadmium, Total	ND		mg/L	0.0010	EPA 200.7	11/9/09 MNP	11/10/09 13:51 JWK	B1
Chromium, Total	0.0049		mg/L	0.0025	EPA 200.7	11/9/09 MNP	11/10/09 13:51 JWK	B1
Copper, Total	0.016		mg/L	0.0050	EPA 200.7	11/9/09 MNP	11/10/09 13:51 JWK	B1
Lead, Total	ND		mg/L	0.0030	EPA 200.7	11/9/09 MNP	11/10/09 13:51 JWK	B1
Mercury, Total (XLow-level)	ND		mg/L	0.00007	EPA 245.1	11/11/09 BLB	11/11/09 08:26 BLB	B2
Molybdenum, Total	0.041		mg/L	0.010	EPA 200.7	11/9/09 MNP	11/10/09 13:51 JWK	B1
Nickel, Total	ND		mg/L	0.010	EPA 200.7	11/9/09 MNP	11/10/09 13:51 JWK	B1
Silver, Total	ND		mg/L	0.0020	EPA 200.7	11/9/09 MNP	11/10/09 13:51 JWK	B1
Zinc, Total	0.077		mg/L	0.010	EPA 200.7	11/9/09 MNP	11/10/09 13:51 JWK	B1

### Sample Comments:

Matrix interferences were present in this sample which caused one or more surrogates to be recovered outside of the laboratory established control limits for the GC/MS analysis.

Anna G Milliken  
Laboratory Manager



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ANALYTICAL RESULTS

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Workorder 9817556 09-9949/53/62/63/67/65

Lab ID: 9817556004

Date Collected: 11/5/2009 09:14

Matrix: Waste Water

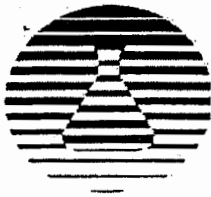
Sample ID: Final Eff 09-9963

Date Received: 11/6/2009 19:30

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed By	Cntr
WET CHEMISTRY								
Cyanide, Total	ND		mg/L	0.0050	EPA 335.4	11/9/09 KEP	11/9/09 14:42 KEP	D1
Cyanide, Weak/Dissociable (Free)	ND		mg/L	0.0050	SM20-4500CNI	11/11/09 KLR	11/11/09 14:45 KLR	D2
Oil/Grease Hexane Extractable	ND		mg/L	2.1	EPA 1664		11/16/09 08:30 ELT	A
Phenolics	ND		mg/L	0.01	EPA 420.4	11/12/09 KRK	11/12/09 10:01 KEP	C

Sample Comments:

Anna G Milliken  
Laboratory Manager



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ANALYTICAL RESULTS QUALIFIERS\FLAGS

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DEPT. OF PUBLIC WORKS

Workorder 9817556 09-9949/53/62/63/67/65

PARAMETER QUALIFIERS\FLAGS

- [1] The result reported for the weak cyanide analysis is higher than the result reported for the total cyanide analysis. The results reported are within the precision limits associated with the methods.



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## ANALYTICAL RESULTS

Workorder: 9778552 09-1984

Lab ID: 9778552001

Date Collected: 3/4/2009 07:52

Matrix: Solid

Sample ID: Belt Press Sludge 09-1984

Date Received: 3/5/2009 16:41

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
<b>VOLATILE ORGANICS</b>										
Acetone	ND		ug/kg	2990	8260/5035	3/17/09	TEH	3/19/09 18:47	TEH	A7
Acetonitrile	ND		ug/kg	57.8	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Acrolein	ND		ug/kg	289	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Acrylonitrile	ND		ug/kg	57.8	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
tert-Amyl methyl ether	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
tert-Amyl Ethylether	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Benzene	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Benzyl Chloride	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Bromobenzene	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Bromochloromethane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Bromodichloromethane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Bromoform	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Bromomethane	ND		ug/kg	23.1	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
2-Butanone	2660		ug/kg	57.8	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
tert.-Butyl Alcohol	ND		ug/kg	2990	8260/5035	3/17/09	TEH	3/19/09 18:47	TEH	A7
-Butylbenzene	713		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
tert-Butylbenzene	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
sec-Butylbenzene	67.4		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Carbon Disulfide	855		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Carbon Tetrachloride	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Chlorobenzene	16.9		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Chlorodibromomethane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Chloroethane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Chloroform	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
1-Chlorohexane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Chloromethane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Chloroprene	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
3-Chloro-1-propene	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
o-Chlorotoluene	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
p-Chlorotoluene	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Cyclohexane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
1,2-Dibromo-3-chloropropane	ND		ug/kg	23.1	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
1,2-Dibromoethane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Dibromomethane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
trans-1,4-Dichloro-2-butene	ND		ug/kg	23.1	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
1,2-Dichlorobenzene	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
1,3-Dichlorobenzene	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
1,4-Dichlorobenzene	733		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Dichlorodifluoromethane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
1,1-Dichloroethane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
1,2-Dichloroethane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
1,1-Dichloroethene	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
cis-1,2-Dichloroethene	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
trans-1,2-Dichloroethene	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Dichlorofluoromethane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8



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## ANALYTICAL RESULTS

Workorder: 9778552 09-1984

Lab ID: 9778552001

Date Collected: 3/4/2009 07:52

Matrix: Solid

Sample ID: Belt Press Sludge 09-1984

Date Received: 3/5/2009 16:41

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
1,3-Dichloropropane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
2,2-Dichloropropane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
1,2-Dichloropropane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
1,1-Dichloropropene	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
cis-1,3-Dichloropropene	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
trans-1,3-Dichloropropene	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
1,3-Dichloropropene, Total	ND		ug/kg	23.1	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Diisobutylene	19.1		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Diisopropyl ether	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
1,4-Dioxane	ND		ug/kg	434	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Ethyl Ether	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Ethyl Methacrylate	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Ethyl Acetate	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Ethyl tert-butyl ether	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Ethylbenzene	42.3		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Freon 113	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Heptane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Hexachlorobutadiene	ND		ug/kg	34.7	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Hexachloroethane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Hexane	ND		ug/kg	17.3	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
2-Hexanone	ND		ug/kg	57.8	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Iodomethane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Isobutyl alcohol	ND		ug/kg	139	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Isopropyl Alcohol	1680	1	ug/kg	57.8	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Isopropylbenzene	18.9		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
p-Isopropyltoluene	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Methacrylonitrile	ND		ug/kg	28.9	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Methyl methacrylate	ND		ug/kg	231	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Methyl acetate	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Methyl cyclohexane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Methyl t-Butyl Ether	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
4-Methyl-2-Pentanone(MIBK)	163		ug/kg	57.8	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Methylene Chloride	119		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Naphthalene	1190		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Nitrobenzene	ND		ug/kg	520	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
2-Nitropropane	ND		ug/kg	57.8	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Octane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Pentane	30.2	1	ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
n-Propanol	ND		ug/kg	139	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Propionitrile	ND		ug/kg	57.8	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
n-Propylbenzene	119		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Styrene	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
1,1,1,2-Tetrachloroethane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
1,1,2,2-Tetrachloroethane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Tetrachloroethene	15.6		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Tetrahydrofuran	ND		ug/kg	57.8	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8



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## ANALYTICAL RESULTS

Workorder: 9778552 09-1984

Lab ID: 9778552001

Date Collected: 3/4/2009 07:52

Matrix: Solid

Sample ID: Belt Press Sludge 09-1984

Date Received: 3/5/2009 16:41

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Toluene	281		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Total Xylenes	199		ug/kg	34.7	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
1,2,4-Trichlorobenzene	ND		ug/kg	28.9	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
1,1,1-Trichloroethane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
1,1,2-Trichloroethane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Trichloroethene	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Trichlorofluoromethane	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
1,2,3-Trichloropropane	ND		ug/kg	23.1	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
1,2,4-Trimethylbenzene	1080		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
1,3,5-Trimethylbenzene	311		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Vinyl Acetate	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Vinyl Chloride	ND		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
o-Xylene	70.8		ug/kg	11.6	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
mp-Xylene	128		ug/kg	23.1	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
<b>Surrogate Recoveries</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>Limits</b>	<b>Method</b>	<b>Prepared</b>	<b>By</b>	<b>Analyzed</b>	<b>By</b>	<b>Cntr</b>
2-Dichloroethane-d4 (S)	60.4	4	%	71-146	8260/5035	3/17/09	TEH	3/19/09 18:47	TEH	A7
2-Bromofluorobenzene (S)	51.7		%	46-138	8260/5035	3/17/09	TEH	3/19/09 18:47	TEH	A7
Toluene-d8 (S)	60.8		%	54-141	8260/5035	3/17/09	TEH	3/19/09 18:47	TEH	A7
Dibromofluoromethane (S)	62.1		%	42-143	8260/5035	3/17/09	TEH	3/19/09 18:47	TEH	A7
<b>Surrogate Recoveries</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>Limits</b>	<b>Method</b>	<b>Prepared</b>	<b>By</b>	<b>Analyzed</b>	<b>By</b>	<b>Cntr</b>
1,2-Dichloroethane-d4 (S)	115		%	56-124	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Toluene-d8 (S)	140	4	%	59-131	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
Dibromofluoromethane (S)	121		%	62-123	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8
4-Bromofluorobenzene (S)	152	4	%	51-128	8260/5035	3/17/09	ECR	3/18/09 12:42	ECR	A8

### SEMIVOLATILES

Acenaphthene	ND		ug/kg	1260	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Acenaphthylene	ND		ug/kg	1260	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Anthracene	ND		ug/kg	1260	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Benzo(a)anthracene	ND		ug/kg	1260	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Benzo(a)pyrene	ND		ug/kg	1260	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Benzo(b)fluoranthene	ND		ug/kg	1260	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Benzo(g,h,i)perylene	ND		ug/kg	1260	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Benzo(k)fluoranthene	ND		ug/kg	1260	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
4-Bromophenyl-phenylether	ND		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Butylbenzylphthalate	ND		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Carbazole	ND		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
4-Chloro-3-methylphenol	ND		ug/kg	6800	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
4-Chloroaniline	13000		ug/kg	6800	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Bis(2-Chloroethoxy)methane	ND		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Bis(2-Chloroethyl)ether	ND		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
bis(2-Chloroisopropyl)ether	ND		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
2-Chloronaphthalene	ND		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
2-Chlorophenol	ND		ug/kg	6800	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
2-Chlorophenyl-phenylether	ND		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Chrysene	ND		ug/kg	1260	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2





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## ANALYTICAL RESULTS

Workorder: 9778552 09-1984

Lab ID: 9778552001

Date Collected: 3/4/2009 07:52

Matrix: Solid

Sample ID: Belt Press Sludge 09-1984

Date Received: 3/5/2009 16:41

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
mp-Cresol	ND		ug/kg	6800	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
o-Cresol	ND		ug/kg	6800	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Di-n-Butylphthalate	ND		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Di-n-Octylphthalate	ND		ug/kg	6800	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Dibenzo(a,h)anthracene	ND		ug/kg	1260	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Dibenzofuran	ND		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
1,2-Dichlorobenzene	ND		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
1,3-Dichlorobenzene	ND		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
1,4-Dichlorobenzene	ND		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
3,3-Dichlorobenzidine	ND		ug/kg	13600	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
2,4-Dichlorophenol	ND		ug/kg	6800	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Diethylphthalate	ND		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
2,4-Dimethylphenol	ND		ug/kg	6800	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Dimethylphthalate	ND		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
2,4-Dinitrophenol	ND		ug/kg	6800	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
2,4-Dinitrotoluene	ND		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
2,6-Dinitrotoluene	ND		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Bis(2-Ethylhexyl)phthalate	72600		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Fluoranthene	ND		ug/kg	1260	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Fluorene	ND		ug/kg	1260	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Hexachlorobenzene	ND		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Hexachlorobutadiene	ND		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Hexachlorocyclopentadiene	ND		ug/kg	6800	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Hexachloroethane	ND		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Indeno(1,2,3-cd)pyrene	ND		ug/kg	1260	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Isophorone	ND		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
2-Methyl-4,6-dinitrophenol	ND		ug/kg	6800	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
2-Methylnaphthalene	3680		ug/kg	1260	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Naphthalene	3400		ug/kg	1260	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
2-Nitroaniline	ND		ug/kg	6800	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
3-Nitroaniline	ND		ug/kg	6800	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
4-Nitroaniline	ND		ug/kg	6800	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Nitrobenzene	ND		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
2-Nitrophenol	ND		ug/kg	6800	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
4-Nitrophenol	ND		ug/kg	6800	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
N-Nitroso-di-n-propylamine	ND		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
N-Nitrosodiphenylamine	ND		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Pentachlorophenol	ND		ug/kg	6800	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Phenanthrene	2150		ug/kg	1260	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Phenol	ND		ug/kg	6800	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Pyrene	ND		ug/kg	1260	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
1,2,4-Trichlorobenzene	ND		ug/kg	2520	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
2,4,5-Trichlorophenol	ND		ug/kg	6800	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
2,4,6-Trichlorophenol	ND		ug/kg	6800	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
4,6-Tribromophenol (S)	85.4		%	37-123	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Terphenyl-d14 (S)	59.4		%	38-113	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2

Report ID: 9778552

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## ANALYTICAL RESULTS

Workorder: 9778552 09-1984

Lab ID: 9778552001 Date Collected: 3/4/2009 07:52 Matrix: Solid  
Sample ID: Belt Press Sludge 09-1984 Date Received: 3/5/2009 16:41

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
2-Fluorobiphenyl (S)	89.9		%	45-105	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
2-Fluorophenol (S)	83.3		%	35-104	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Phenol-d5 (S)	85.2		%	40-100	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2
Nitrobenzene-d5 (S)	88.7		%	41-110	SW846 8270D	3/18/09	GEC	3/20/09 15:45	CHS	B2

### PESTICIDES

Aldrin	ND		ug/kg	86.1	SW846 8081B	3/18/09	KMR	3/20/09 11:33	KJH	B1
alpha-BHC	ND		ug/kg	86.1	SW846 8081B	3/18/09	KMR	3/20/09 11:33	KJH	B1
beta-BHC	ND		ug/kg	86.1	SW846 8081B	3/18/09	KMR	3/20/09 11:33	KJH	B1
delta-BHC	ND		ug/kg	86.1	SW846 8081B	3/18/09	KMR	3/20/09 11:33	KJH	B1
gamma-BHC	ND		ug/kg	86.1	SW846 8081B	3/18/09	KMR	3/20/09 11:33	KJH	B1
Chlordane	ND		ug/kg	3550	SW846 8081B	3/18/09	KMR	3/20/09 11:33	KJH	B1
4,4'-DDD	ND		ug/kg	167	SW846 8081B	3/18/09	KMR	3/20/09 11:33	KJH	B1
4,4'-DDE	ND		ug/kg	167	SW846 8081B	3/18/09	KMR	3/20/09 11:33	KJH	B1
4,4'-DDT	ND	2	ug/kg	167	SW846 8081B	3/18/09	KMR	3/20/09 11:33	KJH	B1
Dieldrin	ND		ug/kg	167	SW846 8081B	3/18/09	KMR	3/20/09 11:33	KJH	B1
Endosulfan I	ND		ug/kg	86.1	SW846 8081B	3/18/09	KMR	3/20/09 11:33	KJH	B1
Endosulfan II	ND		ug/kg	167	SW846 8081B	3/18/09	KMR	3/20/09 11:33	KJH	B1
Endosulfan Sulfate	ND		ug/kg	167	SW846 8081B	3/18/09	KMR	3/20/09 11:33	KJH	B1
Endrin	ND		ug/kg	167	SW846 8081B	3/18/09	KMR	3/20/09 11:33	KJH	B1
Endrin Aldehyde	ND		ug/kg	167	SW846 8081B	3/18/09	KMR	3/20/09 11:33	KJH	B1
Heptachlor	ND		ug/kg	86.1	SW846 8081B	3/18/09	KMR	3/20/09 11:33	KJH	B1
Heptachlor Epoxide	ND		ug/kg	86.1	SW846 8081B	3/18/09	KMR	3/20/09 11:33	KJH	B1
Mirex	ND		ug/kg	167	SW846 8081B	3/18/09	KMR	3/20/09 11:33	KJH	B1
Toxaphene	ND		ug/kg	3550	SW846 8081B	3/18/09	KMR	3/20/09 11:33	KJH	B1
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
Decachlorobiphenyl (S)	92.6		%	30-150	SW846 8081B	3/18/09	KMR	3/20/09 11:33	KJH	B1
Tetrachloro-m-xylene (S)	66.7		%	30-131	SW846 8081B	3/18/09	KMR	3/20/09 11:33	KJH	B1

### WET CHEMISTRY

Ammonia-nitrogen, Total	2850		mg/kg	38.3	SM4500D	3/11/09	JJS	3/11/09 05:15	JJS	A3
Biochemical Oxygen Demand	40400		mg/kg	10.2	SM20-5210 B			3/5/09 23:30	JOJ	A
Color, Apparent	Black				In-House			3/11/09 07:00	AH	A
Cyanide, Total	2.3	3	mg/kg	1.3	SW846 9012B	3/11/09	KEP	3/12/09 11:47	KLZ	A4
Cyanide, Weak/Dissociable(Free)	ND		mg/kg	1.3	SM20-4500CNI	3/15/09	TMY	3/16/09 10:29	KLZ	A6
Hexane Extractable Material	66300		mg/kg	1020	SW846 9071B			3/18/09 15:51	ELM	A
Layering	0				In-House			3/11/09 07:00	AH	A
Moisture	80.4		%	0.1	SM20-2540 G			3/6/09 03:18	JEP	A
Number of Phases	1				In-House			3/11/09 07:00	AH	A
Odor	Sludge				In-House			3/11/09 07:00	AH	A
Phenolics	25.6		mg/kg	2.5	SW846 9066	3/9/09	KEP	3/10/09 12:13	KEP	A
Phosphorus, Total	17700		mg/kg	499	EPA 365.1	3/12/09	KEP	3/16/09 01:53	KRK	A5
Physical State	Solid				In-House			3/11/09 07:00	AH	A
Silica Gel Treated HEM	25900		mg/kg	1020	SW846 9071B			3/18/09 15:51	ELM	A



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## ANALYTICAL RESULTS

Workorder: 9778552 09-1984

Lab ID: 9778552001 Date Collected: 3/4/2009 07:52 Matrix: Solid  
Sample ID: Belt Press Sludge 09-1984 Date Received: 3/5/2009 16:41

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Total Solids	19.6		%	0.1	SM20-2540 G			3/6/09 03:18	JEP	A
<b>METALS</b>										
Antimony, Total	ND		mg/kg	13.4	SW846 6010C	3/9/09	MNP	3/10/09 04:00	TED	
Arsenic, Total	ND		mg/kg	13.4	SW846 6010C	3/9/09	MNP	3/10/09 04:00	SRT	A2
Beryllium, Total	ND		mg/kg	4.5	SW846 6010C	3/9/09	MNP	3/10/09 04:00	TED	
Cadmium, Total	4.0		mg/kg	0.89	SW846 6010C	3/9/09	MNP	3/10/09 04:00	SRT	A2
Chromium, Total	117		mg/kg	4.5	SW846 6010C	3/9/09	MNP	3/10/09 04:00	SRT	A2
Copper, Total	501		mg/kg	8.9	SW846 6010C	3/9/09	MNP	3/10/09 04:00	SRT	A2
Lead, Total	113		mg/kg	8.9	SW846 6010C	3/9/09	MNP	3/10/09 04:00	SRT	A2
Mercury, Total	2.7		mg/kg	1.0	SW846 7471B	3/19/09	BLB	3/19/09 08:53	BLB	A7
Molybdenum, Total	54.4		mg/kg	8.9	SW846 6010C	3/9/09	MNP	3/10/09 04:00	SRT	A2
Nickel, Total	75.1		mg/kg	8.9	SW846 6010C	3/9/09	MNP	3/10/09 04:00	SRT	A2
Selenium, Total	ND		mg/kg	22.4	SW846 6010C	3/9/09	MNP	3/10/09 04:00	TED	
Silver, Total	8.1		mg/kg	2.2	SW846 6010C	3/9/09	MNP	3/10/09 04:00	SRT	A2
Thallium, Total	ND		mg/kg	13.4	SW846 6010C	3/9/09	MNP	3/10/09 04:00	TED	
inc, Total	1460		mg/kg	8.9	SW846 6010C	3/9/09	MNP	3/10/09 04:00	SRT	A2

### Sample Comments:

This sample was collected in a soil jar for the volatile analysis. The sample was prepared by Method 5035 after the 48-hour holding time.

One or more of the method 8260 internal standards and surrogates were recovered outside of the control limits. The sample was re-analyzed with similar results, indicating a significant matrix interference.

A dilution of the GCMS volatiles analysis was performed outside of the holding time because one or more of the analytes exceeded the calibration range in the initial analysis.

This sample was extracted with an associated matrix spike and matrix spike duplicate for the 8082 PCB analysis. Due to the dilution necessary for the sample the matrix spike and matrix spike duplicate were unable to be evaluated.

This sample was analyzed at a dilution in the 8081 Pesticide analysis due to sample matrix interference. Reporting limits were adjusted accordingly.

  
Anna G Milliken  
Laboratory Manager



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**ANALYTICAL RESULTS QUALIFIERS\FLAGS**

Workorder: 9778552 09-1984

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**PARAMETER QUALIFIERS\FLAGS**

- [1] This compound was recovered above quality control criteria in the LCS associated with this sample. The data user is cautioned that results may be biased high.
- [2] Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 15% of the initial calibration for the 8081 analysis. This compound was bias low 30% in the bracketing CCV. Data for this compound may have been impacted.
- [3] The recovery of the Matrix Spike (MS) associated to this analyte was outside of the control limits. The LCS was within established control limits. The failed recovery of the MS may be due to sample matrix interferences.
- [4] The surrogate recovery was outside of the established control limits.



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## ANALYTICAL RESULTS

Workorder 9778550 09-1984

Lab ID: 9778550001

Date Collected: 3/4/2009 07:53

Matrix: Solid

Sample ID: Biosolids 09-1984

Date Received: 3/5/2009 16:41

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Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
<b>TCLP VOLATILE ORGANICS</b>									
Benzene	ND		ug/L	50.0	SW846 8260B		3/10/09 16:45	TEH	A
2-Butanone	ND		ug/L	500	SW846 8260B		3/10/09 16:45	TEH	A
Carbon Tetrachloride	ND		ug/L	50.0	SW846 8260B		3/10/09 16:45	TEH	A
Chlorobenzene	ND		ug/L	50.0	SW846 8260B		3/10/09 16:45	TEH	A
Chloroform	ND		ug/L	50.0	SW846 8260B		3/10/09 16:45	TEH	A
1,2-Dichloroethane	ND		ug/L	50.0	SW846 8260B		3/10/09 16:45	TEH	A
1,1-Dichloroethene	ND		ug/L	50.0	SW846 8260B		3/10/09 16:45	TEH	A
Tetrachloroethene	ND		ug/L	50.0	SW846 8260B		3/10/09 16:45	TEH	A
Trichloroethene	ND		ug/L	50.0	SW846 8260B		3/10/09 16:45	TEH	A
Vinyl Chloride	ND		ug/L	50.0	SW846 8260B		3/10/09 16:45	TEH	A
<b>Surrogate Recoveries</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>Limits</b>	<b>Method</b>	<b>Prepared By</b>	<b>Analyzed</b>	<b>By</b>	<b>Cntr</b>
1,2-Dichloroethane-d4 (S)	94.6		%	62-133	SW846 8260B		3/10/09 16:45	TEH	A
4-Bromofluorobenzene (S)	90.5		%	79-114	SW846 8260B		3/10/09 16:45	TEH	A
Toluene-d8 (S)	97.8		%	76-127	SW846 8260B		3/10/09 16:45	TEH	A
mofluoromethane (S)	99.3		%	78-116	SW846 8260B		3/10/09 16:45	TEH	A
<b>PCBs</b>									
Aroclor-1016	ND		mg/kg	0.17	SW846 8082A	3/9/09 SAS	3/10/09 13:39	JJH	A3
Aroclor-1221	ND		mg/kg	0.17	SW846 8082A	3/9/09 SAS	3/10/09 13:39	JJH	A3
Aroclor-1232	ND		mg/kg	0.17	SW846 8082A	3/9/09 SAS	3/10/09 13:39	JJH	A3
Aroclor-1242	ND		mg/kg	0.17	SW846 8082A	3/9/09 SAS	3/10/09 13:39	JJH	A3
Aroclor-1248	ND		mg/kg	0.17	SW846 8082A	3/9/09 SAS	3/10/09 13:39	JJH	A3
Aroclor-1254	ND		mg/kg	0.17	SW846 8082A	3/9/09 SAS	3/10/09 13:39	JJH	A3
Aroclor-1260	ND		mg/kg	0.17	SW846 8082A	3/9/09 SAS	3/10/09 13:39	JJH	A3
<b>Surrogate Recoveries</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>Limits</b>	<b>Method</b>	<b>Prepared By</b>	<b>Analyzed</b>	<b>By</b>	<b>Cntr</b>
Decachlorobiphenyl (S)	78.8		%	30-150	SW846 8082A	3/9/09 SAS	3/10/09 13:39	JJH	A3
Tetrachloro-m-xylene (S)	77		%	30-136	SW846 8082A	3/9/09 SAS	3/10/09 13:39	JJH	A3
<b>WET CHEMISTRY</b>									
Cyanide, Reactive	ND		ppm	10.0	SW-846 7.3CN	3/11/09 NLK	3/12/09 09:32	KLZ	A
Free Liquids	Negative				SW846 9095		3/13/09 05:50	SDL	A
Hexane Extractable Material	30300		mg/kg	1020	SW846 9071B		3/18/09 15:51	ELM	A
Ignitability	See comment	1			SW846 1030		3/18/09 11:00	AH	A
Moisture	80.4		%	0.1	SM20-2540 G		3/6/09 03:18	JEP	A
pH	8.21	2,3	pH_Units		SW846 9045D		3/7/09 06:40	SAD	A
Silica Gel Treated HEM	15800		mg/kg	1020	SW846 9071B		3/18/09 15:51	ELM	A
Solids, Total Volatile	68.4		%	1.0	SM20-2540 G		3/6/09 03:18	JEP	A
Sulfide, Reactive	ND		ppm	6.3	SW846 7.3	3/11/09 NLK	3/12/09 09:00	NJA	A
Total Petroleum HC's (NonPolar)	3870		mg/kg	1020	EPA 418.1	3/9/09 MPP	3/9/09 15:30	MPP	C1
Total Solids	19.6		%	0.1	SM20-2540 G		3/6/09 03:18	JEP	A

## METALS



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## ANALYTICAL RESULTS

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MAR 25 2009

Workorder 9778550 09-1984

Lab ID: 9778550001

Date Collected: 3/4/2009 07:53

Sample ID: Biosolids 09-1984

Date Received: 3/5/2009 16:41

OFFICE OF PUBLIC WORKS  
Matrix: 1155

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Arsenic, Total	ND		mg/kg	13.9	SW846 6010C	3/17/09	MNP	3/17/09 14:30	TED	A11
Barium, Total	369		mg/kg	4.6	SW846 6010C	3/17/09	MNP	3/17/09 14:30	TED	A11
Cadmium, Total	4.9		mg/kg	0.93	SW846 6010C	3/17/09	MNP	3/17/09 14:30	TED	A11
Chromium, Total	93.7		mg/kg	4.6	SW846 6010C	3/17/09	MNP	3/17/09 14:30	TED	A11
Copper, Total	402		mg/kg	9.3	SW846 6010C	3/17/09	MNP	3/17/09 14:30	TED	A11
Lead, Total	89.8		mg/kg	9.3	SW846 6010C	3/17/09	MNP	3/17/09 14:30	TED	A11
Mercury, Total	1.1		mg/kg	1.0	SW846 7471B	3/19/09	BLB	3/19/09 08:50	BLB	A12
Molybdenum, Total	47.0		mg/kg	9.3	SW846 6010C	3/17/09	MNP	3/17/09 14:30	TED	A11
Nickel, Total	69.9		mg/kg	9.3	SW846 6010C	3/17/09	MNP	3/17/09 14:30	TED	A11
Selenium, Total	ND		mg/kg	23.2	SW846 6010C	3/17/09	MNP	3/17/09 14:30	TED	A11
Silver, Total	5.8		mg/kg	2.3	SW846 6010C	3/17/09	MNP	3/17/09 14:30	TED	A11
Zinc, Total	1350		mg/kg	9.3	SW846 6010C	3/17/09	MNP	3/17/09 14:30	TED	A11

### TCLP METALS

Arsenic, Total	ND		mg/L	0.22	SW846 6010C	3/9/09	MNP	3/9/09 14:04	TED	A2
Barium, Total	ND		mg/L	0.56	SW846 6010C	3/9/09	MNP	3/9/09 14:04	TED	A2
Cadmium, Total	ND		mg/L	0.11	SW846 6010C	3/9/09	MNP	3/9/09 14:04	TED	A2
Chromium, Total	ND		mg/L	0.11	SW846 6010C	3/9/09	MNP	3/9/09 14:04	TED	A2
Copper, Total	ND		mg/L	0.011	SW846 6010C	3/9/09	MNP	3/9/09 14:04	TED	A2
Iron, Total	0.38		mg/L	0.070	SW846 6010C	3/9/09	MNP	3/9/09 14:04	TED	A2
Lead, Total	ND		mg/L	0.11	SW846 6010C	3/9/09	MNP	3/9/09 14:04	TED	A2
Mercury, Total	ND		mg/L	0.0020	SW846 7470A	3/12/09	BLB	3/12/09 11:55	BLB	A5
Nickel, Total	0.070		mg/L	0.022	SW846 6010C	3/9/09	MNP	3/9/09 14:04	TED	A2
Selenium, Total	ND		mg/L	0.22	SW846 6010C	3/9/09	MNP	3/9/09 14:04	TED	A2
Silver, Total	ND		mg/L	0.11	SW846 6010C	3/9/09	MNP	3/9/09 14:04	TED	A2
Zinc, Total	0.40		mg/L	0.020	SW846 6010C	3/9/09	MNP	3/9/09 14:04	TED	A2

### TCLP SEMI-VOLATILES

m,p-Cresol	216		ug/L	160	SW846 8270D	3/9/09	CAC	3/10/09 10:55	DRS	A1
o-Cresol	ND		ug/L	160	SW846 8270D	3/9/09	CAC	3/10/09 10:55	DRS	A1
1,4-Dichlorobenzene	ND		ug/L	60.0	SW846 8270D	3/9/09	CAC	3/10/09 10:55	DRS	A1
2,4-Dinitrotoluene	ND		ug/L	60.0	SW846 8270D	3/9/09	CAC	3/10/09 10:55	DRS	A1
Hexachlorobenzene	ND		ug/L	60.0	SW846 8270D	3/9/09	CAC	3/10/09 10:55	DRS	A1
Hexachlorobutadiene	ND		ug/L	60.0	SW846 8270D	3/9/09	CAC	3/10/09 10:55	DRS	A1
Hexachloroethane	ND		ug/L	60.0	SW846 8270D	3/9/09	CAC	3/10/09 10:55	DRS	A1
Nitrobenzene	ND		ug/L	60.0	SW846 8270D	3/9/09	CAC	3/10/09 10:55	DRS	A1
Pentachlorophenol	ND		ug/L	160	SW846 8270D	3/9/09	CAC	3/10/09 10:55	DRS	A1
Pyridine	ND		ug/L	160	SW846 8270D	3/9/09	CAC	3/10/09 10:55	DRS	A1
2,4,5-Trichlorophenol	ND		ug/L	160	SW846 8270D	3/9/09	CAC	3/10/09 10:55	DRS	A1
2,4,6-Trichlorophenol	ND		ug/L	160	SW846 8270D	3/9/09	CAC	3/10/09 10:55	DRS	A1

Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
2,4,6-Tribromophenol (S)	76.1		%	40-125	SW846 8270D	3/9/09	CAC	3/10/09 10:55	DRS	A1
Phenol-d5 (S)	30.3		%	13-49	SW846 8270D	3/9/09	CAC	3/10/09 10:55	DRS	A1
Triphenyl-d14 (S)	61		%	50-122	SW846 8270D	3/9/09	CAC	3/10/09 10:55	DRS	A1
Nitrobenzene-d5 (S)	73		%	40-110	SW846 8270D	3/9/09	CAC	3/10/09 10:55	DRS	A1
2-Fluorophenol (S)	46.5		%	20-75	SW846 8270D	3/9/09	CAC	3/10/09 10:55	DRS	A1



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ANALYTICAL RESULTS MAR 25 2009

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Workorder 9778550 09-1984

Lab ID: 9778550001

Date Collected: 3/4/2009 07:53

Matrix: Solid

Sample ID: Biosolids 09-1984

Date Received: 3/5/2009 16:41

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
2-Fluorobiphenyl (S)	62.7		%	50-110	SW846 8270D	3/9/09 CAC	3/10/09 10:55	DRS	A1

## TCLP PESTICIDES

gamma-BHC	ND		ug/L	1.0	SW846 8081B	3/12/09 CMG	3/13/09 20:48	KJH	A8
Chlordane	ND		ug/L	20.0	SW846 8081B	3/12/09 CMG	3/13/09 20:48	KJH	A8
Endrin	ND		ug/L	1.0	SW846 8081B	3/12/09 CMG	3/13/09 20:48	KJH	A8
Heptachlor	ND		ug/L	1.0	SW846 8081B	3/12/09 CMG	3/13/09 20:48	KJH	A8
Heptachlor Epoxide	ND		ug/L	1.0	SW846 8081B	3/12/09 CMG	3/13/09 20:48	KJH	A8
Methoxychlor	ND		ug/L	1.0	SW846 8081B	3/12/09 CMG	3/13/09 20:48	KJH	A8
Toxaphene	ND		ug/L	40.0	SW846 8081B	3/12/09 CMG	3/13/09 20:48	KJH	A8

Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared By	Analyzed	By	Cntr
Decachlorobiphenyl (S)	71.5		%	30-150	SW846 8081B	3/12/09 CMG	3/13/09 20:48	KJH	A8
Tetrachloro-m-xylene (S)	62.9		%	30-150	SW846 8081B	3/12/09 CMG	3/13/09 20:48	KJH	A8

## TCLP HERBICIDES

2,4,5-TP	ND		ug/L	4.0	SW846 8151A	3/11/09 SAS	3/12/09 15:06	KJH	A6
2,4-Dichlorophenylacetic acid (S)	127		%	58-154	SW846 8151A	3/11/09 SAS	3/12/09 15:06	KJH	A6

## ASTM LEACHATE

Ammonia-N	53.9		mg/L	0.500	D6919-03		3/20/09 14:40	LMM	A
Chemical Oxygen Demand (COD)	270		mg/L	15	EPA 410.4		3/17/09 11:05	DTL	A
Oil/Grease Hexane Extractable	3.8		mg/L	3.3	EPA 1664		3/20/09 00:00	JJS	A
Total Petroleum HC's (NonPolar)	4.4		mg/L	0.7	EPA 418.1	3/9/09 MPP	3/9/09 15:30	MPP	A4
Total Solids	412	4	mg/L	9	SM20-2540		3/10/09 19:35	MBR	A

## ASTM LEACHATE PREP

Final pH	7.26		pH_Units		D3987-85		3/6/09 05:40	EL	A
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## TCLP LEACHATE

Extraction Fluid Used	1				SW846 1311		3/6/09 05:40	EL	A
Final pH	5.46		pH_Units		SW846 1311		3/6/09 05:40	EL	A
Preliminary pH after DI water	8.21		pH_Units		SW846 1311		3/6/09 05:40	EL	A
Preliminary pH after HCl	2.32		pH_Units		SW846 1311		3/6/09 05:40	EL	A

## Sample Comments:

1. ASTM leachate was filtered through a 0.6 to 0.8 micron pore size filter after rotation.



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ANALYTICAL RESULTS

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Workorder 9778550 09-1984

Lab ID: 9778550001

Date Collected: 3/4/2009 07:53

Matrix: Solid

Sample ID: Biosolids 09-1984

Date Received: 3/5/2009 16:41

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed By	Cntr
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Anna G Milliken  
Laboratory Manager





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ANALYTICAL RESULTS QUALIFIERS\FLAGS

RECEIVED  
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Workorder 9778550 09-1984

PARAMETER QUALIFIERS\FLAGS

- [1] According to Pa/USEPA regulations, this sample is not considered to be ignitable. (Ref 40 CFR 261.21)
- [2] The solid pH measured in water was 8.213 at 20.5 degrees C.
- [3] This sample was received at the laboratory after the holding time for pH had expired.
- [4] The leachate blank associated with this sample contained 9 mg/L total solids. The reporting limit has been adjusted accordingly.



MAR 25 2009  
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Form 43 and Form U analysis updated 9/12/07

Total Metals: Arsenic, barium, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, silver, zinc

pH

Ignitability

-Reactive Sulfide and Reactive Cyanide-

Free Liquids

PCB's

Total solids

Total volatile solids

Oil and Grease and Total Petroleum Hydrocarbons

ASTM - report as mg/L

pH

COD

TS

Oil and Grease and petroleum hydrocarbons

Ammonia-Nitrogen

TCLP - include all parameters found in 40 CFR 261.24 as well as pH of extract.

Report all results in mg/L

pH of extract

-Barium

Chromium

Iron

Mercury

Selenium

Zinc

Cresol

2,4-Dinitrotoluene

Hexachlorobutadiene

Pentachlorophenol

2,4,5-Trichlorophenol

Benzene

Chlorobenzene

1,2-Dichloroethane

Tetrachloroethylene

Chlordane

Endrin

Lindane

Toxaphene

Methyl ethyl ketone (2- Butanone)

Trichloroethylene

- Arsenic -

Cadmium

Copper

Lead

- Nickel -

Silver

o,m,p Cresols

1,4-Dichlorobenzene

Hexachlorobenzene

Hexachloroethane

Pyridine

2,4,6-Trichlorophenol

Carbon Tetrachloride

Chloroform

1,1-Dichloroethylene

Vinyl Chloride

2,4-D

Heptachlor (and its Epoxide)

Methoxychlor

2,4,5-TP (Silvex)

Nitrobenzene

Pyridine



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## ANALYTICAL RESULTS

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Workorder 9792538 Belt Press Sludge

Lab ID: 9792538001

Date Collected: 6/2/2009 08:10

Matrix: Solid

Sample ID: Belt Press Sludge

Date Received: 6/3/2009 16:41

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
<b>WET CHEMISTRY</b>									
Ammonia-nitrogen, Total	5340		mg/kg	43.0	SM4500D	6/9/09 JJS	6/9/09 15:15	ELM	A4
Biochemical Oxygen Demand	57000		mg/kg	11.5	SM20-5210B		6/3/09 23:43	JOJ	A
Color, Apparent	BLACK				In-House		6/17/09 13:00	AH	A
Cyanide, Total	1.4		mg/kg	1.4	SW846 9012B	6/8/09 KLZ	6/8/09 13:51	KLZ	A2
Cyanide, Weak/Dissociable (Free)	ND		mg/kg	1.4	SM20-4500CNI	6/4/09 KEP	6/5/09 12:51	KLZ	A1
Hexane Extractable Material	57700	1	mg/kg	1150	SW846 9071B		6/5/09 07:00	AH	A
Layering	NONE				In-House		6/17/09 13:00	AH	A
Moisture	82.6		%	0.1	SM20-2540 G		6/4/09 07:10	EL	A
Number of Phases	1				In-House		6/17/09 13:00	AH	A
Odor	SLUDGE				In-House		6/17/09 13:00	AH	A
Phenolics	22.1		mg/kg	2.9	SW846 9066	6/9/09 KLZ	6/10/09 06:00	KRK	A
Phosphorus, Total	18500		mg/kg	586	EPA 365.1	6/17/09 KRK	6/19/09 08:55	KLZ	A6
Physical State	SOLID				In-House		6/17/09 13:00	AH	A
Gel Treated HEM	6080		mg/kg	1150	SW846 9071B		6/5/09 07:00	AH	A
Total Solids	17.4		%	0.1	SM20-2540 G		6/4/09 07:10	EL	A
<b>METALS</b>									
Arsenic, Total	ND		mg/kg	9.7	SW846 6010C	6/8/09 BMS	6/10/09 07:46	SRT	A3
Cadmium, Total	4.0		mg/kg	2.4	SW846 6010C	6/8/09 BMS	6/10/09 07:46	SRT	A3
Chromium, Total	110		mg/kg	4.9	SW846 6010C	6/8/09 BMS	6/10/09 07:46	SRT	A3
Copper, Total	513		mg/kg	9.7	SW846 6010C	6/8/09 BMS	6/10/09 07:46	SRT	A3
Lead, Total	116		mg/kg	9.7	SW846 6010C	6/8/09 BMS	6/10/09 07:46	SRT	A3
Mercury, Total	ND		mg/kg	1.0	SW846 7471B	6/11/09 BLB	6/12/09 13:24	BLB	A5
Molybdenum, Total	36.9		mg/kg	9.7	SW846 6010C	6/8/09 BMS	6/10/09 07:46	SRT	A3
Nickel, Total	56.2		mg/kg	9.7	SW846 6010C	6/8/09 BMS	6/10/09 07:46	SRT	A3
Silver, Total	8.6		mg/kg	2.4	SW846 6010C	6/8/09 BMS	6/10/09 07:46	SRT	A3
Zinc, Total	1460		mg/kg	9.7	SW846 6010C	6/8/09 BMS	6/10/09 07:46	SRT	A3

### Sample Comments:

  
Anna G Milliken  
Laboratory Manager



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ANALYTICAL RESULTS QUALIFIERS\FLAGS **RECEIVED**

Workorder 9792538 Belt Press Sludge

JUN 26 2009  
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PARAMETER QUALIFIERS\FLAGS

- [1] The QC sample type MS for method SW846 9071B was outside the control limits for the analyte Hexane Extractable Material. The % Recovery was reported as 174 and the control limits were 75 to 125.



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## ANALYTICAL RESULTS

Workorder 9804191 WWTP Quarterly Testing 09-7260

Lab ID: 9804191001

Date Collected: 8/13/2009 13:16

Sample ID: Belt Press Study 09-7260

Date Received: 8/14/2009 16:41

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Solid

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
<b>SEMIVOLATILES</b>									
Acenaphthene	ND		ug/kg	1210	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Acenaphthylene	ND		ug/kg	1210	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Anthracene	ND		ug/kg	1210	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Benzidine	ND		ug/kg	24100	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Benzo(a)anthracene	ND		ug/kg	1210	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Benzo(a)pyrene	ND		ug/kg	1210	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Benzo(b)fluoranthene	ND		ug/kg	1210	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Benzo(g,h,i)perylene	ND		ug/kg	1210	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Benzo(k)fluoranthene	ND		ug/kg	1210	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
4-Bromophenyl-phenylether	ND		ug/kg	2410	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Butylbenzylphthalate	ND		ug/kg	2410	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
4-Chloro-3-methylphenol	ND		ug/kg	6510	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Bis(2-Chloroethoxy)methane	ND		ug/kg	2410	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Bis(2-Chloroethyl)ether	ND		ug/kg	2410	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Bis(2-Chloroisopropyl)ether	ND		ug/kg	2410	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Chloronaphthalene	ND		ug/kg	2410	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
2-Chlorophenol	ND		ug/kg	6510	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
4-Chlorophenyl-phenylether	ND		ug/kg	2410	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Chrysene	ND		ug/kg	1210	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Di-n-Butylphthalate	ND		ug/kg	2410	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Di-n-Octylphthalate	ND		ug/kg	6510	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Dibenzo(a,h)anthracene	ND		ug/kg	1210	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
1,2-Dichlorobenzene	ND		ug/kg	2410	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
1,3-Dichlorobenzene	ND		ug/kg	2410	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
1,4-Dichlorobenzene	ND		ug/kg	2410	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
3,3-Dichlorobenzidine	ND		ug/kg	13000	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
2,4-Dichlorophenol	ND		ug/kg	6510	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Diethylphthalate	ND		ug/kg	2410	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
2,4-Dimethylphenol	ND		ug/kg	6510	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Dimethylphthalate	ND		ug/kg	2410	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
2,4-Dinitrophenol	ND		ug/kg	6510	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
2,4-Dinitrotoluene	ND		ug/kg	2410	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
2,6-Dinitrotoluene	ND		ug/kg	2410	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
1,2-Diphenylhydrazine	ND		ug/kg	2410	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
bis(2-Ethylhexyl)phthalate	43300		ug/kg	2410	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Fluoranthene	ND		ug/kg	1210	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Fluorene	ND		ug/kg	1210	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Hexachlorobenzene	ND		ug/kg	2410	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Hexachlorobutadiene	ND		ug/kg	2410	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Hexachlorocyclopentadiene	ND		ug/kg	6510	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Hexachloroethane	ND		ug/kg	2410	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Indeno(1,2,3-cd)pyrene	ND		ug/kg	1210	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Isophorone	ND		ug/kg	2410	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
2-hydroxy-4,6-dinitrophenol	ND		ug/kg	6510	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Naphthalene	ND		ug/kg	1210	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6
Nitrobenzene	ND		ug/kg	2410	SW846 8270D	8/26/09 KMC	8/29/09 18:35	CHS	A6



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## ANALYTICAL RESULTS

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Workorder 9804191 WWTP Quarterly Testing 09-7260

Lab ID: 9804191001

Date Collected: 8/13/2009 13:16

Matrix: Solid

Sample ID: Belt Press Study 09-7260

Date Received: 8/14/2009 16:41

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
2-Nitrophenol	ND		ug/kg	6510	SW846 8270D	8/26/09	KMC	8/29/09 18:35	CHS	A6
4-Nitrophenol	ND		ug/kg	6510	SW846 8270D	8/26/09	KMC	8/29/09 18:35	CHS	A6
N-Nitrosodimethylamine	ND		ug/kg	2410	SW846 8270D	8/26/09	KMC	8/29/09 18:35	CHS	A6
N-Nitroso-di-n-propylamine	ND		ug/kg	2410	SW846 8270D	8/26/09	KMC	8/29/09 18:35	CHS	A6
N-Nitrosodiphenylamine	ND		ug/kg	2410	SW846 8270D	8/26/09	KMC	8/29/09 18:35	CHS	A6
Pentachlorophenol	ND		ug/kg	13000	SW846 8270D	8/26/09	KMC	8/29/09 18:35	CHS	A6
Phenanthrene	ND		ug/kg	1210	SW846 8270D	8/26/09	KMC	8/29/09 18:35	CHS	A6
Phenol	19900		ug/kg	6510	SW846 8270D	8/26/09	KMC	8/29/09 18:35	CHS	A6
Pyrene	ND		ug/kg	1210	SW846 8270D	8/26/09	KMC	8/29/09 18:35	CHS	A6
1,2,4-Trichlorobenzene	ND		ug/kg	2410	SW846 8270D	8/26/09	KMC	8/29/09 18:35	CHS	A6
2,4,6-Trichlorophenol	ND		ug/kg	6510	SW846 8270D	8/26/09	KMC	8/29/09 18:35	CHS	A6
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr

2,4,6-Tribromophenol (S)	49.7		%	37-123	SW846 8270D	8/26/09	KMC	8/29/09 18:35	CHS	A6
2-Fluorobiphenyl (S)	55.7		%	45-105	SW846 8270D	8/26/09	KMC	8/29/09 18:35	CHS	A6
2-Fluorophenol (S)	63.6		%	35-104	SW846 8270D	8/26/09	KMC	8/29/09 18:35	CHS	A6
benzene-d5 (S)	60.8		%	41-110	SW846 8270D	8/26/09	KMC	8/29/09 18:35	CHS	A6
Phenol-d5 (S)	64.1		%	40-100	SW846 8270D	8/26/09	KMC	8/29/09 18:35	CHS	A6
Terphenyl-d14 (S)	48.5		%	38-113	SW846 8270D	8/26/09	KMC	8/29/09 18:35	CHS	A6

### WET CHEMISTRY

Ammonia-nitrogen, Total	2610		mg/kg	36.2	SM4500D	8/27/09	JJS	8/27/09 04:50	JJS	A7
Biochemical Oxygen Demand	247000		mg/kg	9.7	SM20-5210B			8/14/09 18:26	MLM	A
Color, Apparent	BLACK				In-House			8/17/09 13:13	ELT	A
Cyanide, Total	1.9		mg/kg	1.2	SW846 9012B	8/25/09	KEP	8/25/09 14:20	KEP	A5
Cyanide, Weak/Dissociable(Free)	ND		mg/kg	1.2	SM20-4500CNI	8/21/09	KRK	8/21/09 12:48	KLZ	A2
Hexane Extractable Material	33700		mg/kg	965	SW846 9071B			8/20/09 08:00	NJA	A
Layering	NONE				In-House			8/17/09 13:13	ELT	A
Moisture	79.3		%	0.1	SM20-2540 G			8/15/09 03:05	JJG	A
Number of Phases	1				In-House			8/17/09 13:13	ELT	A
Odor	SLUDGE				In-House			8/17/09 13:13	ELT	A
Phenolics	12.3		mg/kg	1.6	SW846 9066	8/25/09	KRK	8/26/09 04:50	KRK	A
Phosphorus, Total	15500		mg/kg	466	EPA 365.1	8/17/09	KLZ	8/21/09 04:09	KRK	A1
Physical State	SOLID				In-House			8/17/09 13:13	ELT	A
Silica Gel Treated HEM	10600		mg/kg	965	SW846 9071B			8/20/09 08:00	NJA	A
Total Solids	20.7		%	0.1	SM20-2540 G			8/15/09 03:05	JJG	A

### METALS

Arsenic, Total	ND		mg/kg	8.8	SW846 6010C	8/21/09	MNP	8/24/09 04:41	SRT	A3
Cadmium, Total	3.6		mg/kg	2.2	SW846 6010C	8/21/09	MNP	8/24/09 04:41	SRT	A3
Chromium, Total	108		mg/kg	4.4	SW846 6010C	8/21/09	MNP	8/24/09 04:41	SRT	A3
Copper, Total	377		mg/kg	8.8	SW846 6010C	8/21/09	MNP	8/24/09 04:41	SRT	A3
Lead, Total	110		mg/kg	8.8	SW846 6010C	8/21/09	MNP	8/24/09 04:41	SRT	A3
Mercury, Total	3.0		mg/kg	0.83	SW846 7471B	8/25/09	BLB	8/25/09 13:57	BLB	A4
Molybdenum, Total	36.2		mg/kg	8.8	SW846 6010C	8/21/09	MNP	8/24/09 04:41	SRT	A3



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ANALYTICAL RESULTS

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Workorder 9804191 WWTP Quarterly Testing 09-7260

Lab ID: 9804191001

Date Collected: 8/13/2009 13:16

Matrix: Solid

Sample ID: Belt Press Study 09-7260

Date Received: 8/14/2009 16:41

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
Nickel, Total	81.7		mg/kg	8.8	SW846 6010C	8/21/09 MNP	8/24/09 04:41	SRT	A3
Silver, Total	6.9		mg/kg	2.2	SW846 6010C	8/21/09 MNP	8/24/09 04:41	SRT	A3
Zinc, Total	1070		mg/kg	8.8	SW846 6010C	8/21/09 MNP	8/24/09 04:41	SRT	A3

Sample Comments:

Anna G Milliken  
Laboratory Manager



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## ANALYTICAL RESULTS

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Workorder 9807057 09-7889

Lab ID: 9807057001

Date Collected: 9/2/2009 07:40

Matrix: Solid

Sample ID: Biosolids, 09-7889

Date Received: 9/2/2009 16:38

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
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### TCLP VOLATILE ORGANICS

Benzene	ND		ug/L	20.0	SW846 8260B		9/15/09 14:54	MES	A
2-Butanone	ND		ug/L	200	SW846 8260B		9/15/09 14:54	MES	A
Carbon Tetrachloride	ND		ug/L	20.0	SW846 8260B		9/15/09 14:54	MES	A
Chlorobenzene	ND		ug/L	20.0	SW846 8260B		9/15/09 14:54	MES	A
Chloroform	ND		ug/L	20.0	SW846 8260B		9/15/09 14:54	MES	A
1,2-Dichloroethane	ND		ug/L	20.0	SW846 8260B		9/15/09 14:54	MES	A
1,1-Dichloroethene	ND		ug/L	20.0	SW846 8260B		9/15/09 14:54	MES	A
Tetrachloroethene	ND		ug/L	20.0	SW846 8260B		9/15/09 14:54	MES	A
Trichloroethene	ND		ug/L	20.0	SW846 8260B		9/15/09 14:54	MES	A
Vinyl Chloride	ND		ug/L	20.0	SW846 8260B		9/15/09 14:54	MES	A

Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	96.3		%	62-133	SW846 8260B		9/15/09 14:54	MES	A
4-Bromofluorobenzene (S)	81.8		%	79-114	SW846 8260B		9/15/09 14:54	MES	A
Toluene-d8 (S)	98.3		%	76-127	SW846 8260B		9/15/09 14:54	MES	A
1,1,1-Trifluoromethane (S)	88.3		%	78-116	SW846 8260B		9/15/09 14:54	MES	A

### PCBs

Aroclor-1016	ND		mg/kg	0.15	SW846 8082A	9/15/09	RSS	9/17/09 07:52	JEA	A10
Aroclor-1221	ND		mg/kg	0.15	SW846 8082A	9/15/09	RSS	9/17/09 07:52	JEA	A10
Aroclor-1232	ND		mg/kg	0.15	SW846 8082A	9/15/09	RSS	9/17/09 07:52	JEA	A10
Aroclor-1242	ND		mg/kg	0.15	SW846 8082A	9/15/09	RSS	9/17/09 07:52	JEA	A10
Aroclor-1248	ND		mg/kg	0.15	SW846 8082A	9/15/09	RSS	9/17/09 07:52	JEA	A10
Aroclor-1254	ND		mg/kg	0.15	SW846 8082A	9/15/09	RSS	9/17/09 07:52	JEA	A10
Aroclor-1260	ND		mg/kg	0.15	SW846 8082A	9/15/09	RSS	9/17/09 07:52	JEA	A10

Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
Decachlorobiphenyl (S)	59.2		%	30-150	SW846 8082A	9/15/09	RSS	9/17/09 07:52	JEA	A10
Tetrachloro-m-xylene (S)	56.4		%	30-150	SW846 8082A	9/15/09	RSS	9/17/09 07:52	JEA	A10

### ASTM LEACHATE

Ammonia-N	60.4		mg/L	1.00	D6919-03		9/9/09 07:27	ELT	A
Chemical Oxygen Demand (COD)	383		mg/L	15	EPA 410.4		9/14/09 11:30	LMM	A
Oil/Grease Hexane Extractable	ND		mg/L	3.2	EPA 1664		9/22/09 11:00	ELT	
pH in Leachate	7.81		pH_Units		SM4500B		9/18/09 02:45	SAD	A
Total Petroleum HC's(NonPolar)	3.0		mg/L	0.5	EPA 418.1	9/17/09	MPP	9/17/09 13:40	MPP A12
Total Solids	487	1	mg/L	5	SM20-2540		9/8/09 16:22	TDH	A

### WET CHEMISTRY

Cyanide, Reactive	ND		ppm	10	SW-846 7.3CN	9/3/09	DTL	9/4/09 09:47	KLZ	A2
Free Liquids	Negative				SW846 9095			9/3/09 06:50	SDL	A
Free Extractable Material	45300		mg/kg	897	SW846 9071B			9/22/09 08:00	AH	A12
Ignitability	See comment	2			SW846 1030			9/15/09 13:45	SDL	A





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Workorder 9807057 09-7889

Lab ID: 9807057001

Date Collected: 9/2/2009 07:40

Matrix: Solid

Sample ID: Biosolids, 09-7889

Date Received: 9/2/2009 16:38

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Moisture	77.7		%	0.1	SM20-2540 G			9/3/09 07:45	KMW	B
pH	8.08	3	pH_Units		SW846 9045D			9/3/09 05:02	SAD	A
Silica Gel Treated HEM	22900		mg/kg	897	SW846 9071B			9/22/09 08:00	AH	A12
Solids, Total Volatile	66.7		%	1.0	SM20-2540 G			9/2/09 07:45	KMW	A
Sulfide, Reactive	ND		ppm	6.2	SW846 7.3	9/3/09	DTL	9/3/09 13:45	DTL	A1
Total Petroleum HC's(NonPolar)	1720		mg/kg	169	EPA 418.1	9/16/09	MPP	9/16/09 15:20	MPP	A11
Total Solids	22.3		%	0.1	SM20-2540 G			9/3/09 07:45	KMW	B

## METALS

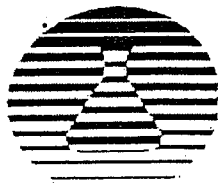
Arsenic, Total	ND		mg/kg	9.0	SW846 6010C	9/18/09	MNP	9/23/09 07:07	TED	A13
Barium, Total	434		mg/kg	4.5	SW846 6010C	9/18/09	MNP	9/23/09 07:07	TED	A13
Cadmium, Total	4.8		mg/kg	2.2	SW846 6010C	9/18/09	MNP	9/23/09 07:07	TED	A13
Chromium, Total	130		mg/kg	4.5	SW846 6010C	9/18/09	MNP	9/23/09 07:07	TED	A13
Copper, Total	577		mg/kg	9.0	SW846 6010C	9/18/09	MNP	9/23/09 07:07	TED	A13
Lead, Total	144		mg/kg	9.0	SW846 6010C	9/18/09	MNP	9/23/09 07:07	TED	A13
Mercury, Total	2.6		mg/kg	0.86	SW846 7471B	9/18/09	BLB	9/18/09 17:08	BLB	A14
Molybdenum, Total	46.3		mg/kg	9.0	SW846 6010C	9/18/09	MNP	9/23/09 07:07	TED	A13
Nickel, Total	75.5		mg/kg	9.0	SW846 6010C	9/18/09	MNP	9/23/09 07:07	TED	A13
Selenium, Total	ND		mg/kg	22.4	SW846 6010C	9/18/09	MNP	9/23/09 07:07	TED	A13
Silver, Total	8.8		mg/kg	2.2	SW846 6010C	9/18/09	MNP	9/23/09 07:07	TED	A13
Zinc, Total	1520		mg/kg	9.0	SW846 6010C	9/18/09	MNP	9/23/09 07:07	TED	A13

## TCLP METALS

Arsenic, Total	ND		mg/L	0.22	SW846 6010C	9/4/09	MNP	9/4/09 13:34	TED	A3
Barium, Total	ND		mg/L	0.56	SW846 6010C	9/4/09	MNP	9/4/09 13:34	TED	A3
Cadmium, Total	ND		mg/L	0.11	SW846 6010C	9/4/09	MNP	9/4/09 13:34	TED	A3
Chromium, Total	ND		mg/L	0.11	SW846 6010C	9/4/09	MNP	9/4/09 13:34	TED	A3
Copper, Total	ND		mg/L	0.011	SW846 6010C	9/4/09	MNP	9/4/09 13:34	TED	A3
Iron, Total	1.0		mg/L	0.066	SW846 6010C	9/4/09	MNP	9/4/09 13:34	TED	A3
Lead, Total	ND		mg/L	0.11	SW846 6010C	9/4/09	MNP	9/4/09 13:34	TED	A3
Mercury, Total	ND		mg/L	0.0020	SW846 7470A	9/10/09	BLB	9/10/09 13:32	BLB	A9
Nickel, Total	0.047		mg/L	0.022	SW846 6010C	9/4/09	MNP	9/4/09 13:34	TED	A3
Selenium, Total	ND		mg/L	0.22	SW846 6010C	9/4/09	MNP	9/4/09 13:34	TED	A3
Silver, Total	ND		mg/L	0.11	SW846 6010C	9/4/09	MNP	9/4/09 13:34	TED	A3
Zinc, Total	0.19		mg/L	0.022	SW846 6010C	9/4/09	MNP	9/4/09 13:34	TED	A3

## TCLP SEMI-VOLATILES

mp-Cresol	204		ug/L	160	SW846 8270D	9/9/09	GMG	9/16/09 03:47	CHS	A5
o-Cresol	ND		ug/L	160	SW846 8270D	9/9/09	GMG	9/16/09 03:47	CHS	A5
1,4-Dichlorobenzene	ND		ug/L	60.0	SW846 8270D	9/9/09	GMG	9/16/09 03:47	CHS	A5
2,4-Dinitrotoluene	ND		ug/L	60.0	SW846 8270D	9/9/09	GMG	9/16/09 03:47	CHS	A5
Hexachlorobenzene	ND		ug/L	60.0	SW846 8270D	9/9/09	GMG	9/16/09 03:47	CHS	A5
Heptachlorobutadiene	ND		ug/L	60.0	SW846 8270D	9/9/09	GMG	9/16/09 03:47	CHS	A5
Heptachloroethane	ND		ug/L	60.0	SW846 8270D	9/9/09	GMG	9/16/09 03:47	CHS	A5
Nitrobenzene	ND		ug/L	60.0	SW846 8270D	9/9/09	GMG	9/16/09 03:47	CHS	A5



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## ANALYTICAL RESULTS

RECEIVED  
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Workorder 9807057 09-7889

Lab ID: 9807057001

Date Collected: 9/2/2009 07:40

Matrix: Solid

Sample ID: Biosolids, 09-7889

Date Received: 9/2/2009 16:38

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Pentachlorophenol	ND		ug/L	320	SW846 8270D	9/9/09	GMG	9/16/09 03:47	CHS	A5
Pyridine	ND		ug/L	160	SW846 8270D	9/9/09	GMG	9/16/09 03:47	CHS	A5
2,4,5-Trichlorophenol	ND		ug/L	160	SW846 8270D	9/9/09	GMG	9/16/09 03:47	CHS	A5
2,4,6-Trichlorophenol	ND		ug/L	160	SW846 8270D	9/9/09	GMG	9/16/09 03:47	CHS	A5
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
2,4,6-Tribromophenol (S)	64.8		%	40-125	SW846 8270D	9/9/09	GMG	9/16/09 03:47	CHS	A5
Phenol-d5 (S)	25.5		%	13-49	SW846 8270D	9/9/09	GMG	9/16/09 03:47	CHS	A5
Terphenyl-d14 (S)	77		%	50-122	SW846 8270D	9/9/09	GMG	9/16/09 03:47	CHS	A5
Nitrobenzene-d5 (S)	70.2		%	40-110	SW846 8270D	9/9/09	GMG	9/16/09 03:47	CHS	A5
2-Fluorophenol (S)	49.8		%	20-75	SW846 8270D	9/9/09	GMG	9/16/09 03:47	CHS	A5
2-Fluorobiphenyl (S)	61.1		%	50-110	SW846 8270D	9/9/09	GMG	9/16/09 03:47	CHS	A5

### TCLP PESTICIDES

gamma-BHC	ND		ug/L	1.0	SW846 8081B	9/9/09	GMG	9/17/09 12:08	KJH	A6
Chlordane	ND		ug/L	20.0	SW846 8081B	9/9/09	GMG	9/17/09 12:08	KJH	A6
in	ND		ug/L	1.0	SW846 8081B	9/9/09	GMG	9/17/09 12:08	KJH	A6
Heptachlor	ND		ug/L	1.0	SW846 8081B	9/9/09	GMG	9/17/09 12:08	KJH	A6
Heptachlor Epoxide	ND		ug/L	1.0	SW846 8081B	9/9/09	GMG	9/17/09 12:08	KJH	A6
Methoxychlor	ND		ug/L	1.0	SW846 8081B	9/9/09	GMG	9/17/09 12:08	KJH	A6
Toxaphene	ND		ug/L	40.0	SW846 8081B	9/9/09	GMG	9/17/09 12:08	KJH	A6
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
Decachlorobiphenyl (S)	58.1		%	30-140	SW846 8081B	9/9/09	GMG	9/17/09 12:08	KJH	A6
Tetrachloro-m-xylene (S)	51.3		%	30-123	SW846 8081B	9/9/09	GMG	9/17/09 12:08	KJH	A6

### TCLP HERBICIDES

2,4-D	ND		ug/L	4.0	SW846 8151A	9/8/09	DJB	9/11/09 07:39	KJH	A4
2,4,5-TP	ND		ug/L	4.0	SW846 8151A	9/8/09	DJB	9/11/09 07:39	KJH	A4
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
2,4-Dichlorophenylacetic acid (S)	113		%	58-154	SW846 8151A	9/8/09	DJB	9/11/09 07:39	KJH	A4

### ASTM LEACHATE PREP

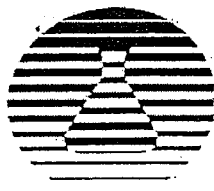
Final pH	6.99		pH_Units	D3987-85	9/3/09 08:00	EL	A
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### TCLP LEACHATE

Extraction Fluid Used	1			SW846 1311	9/4/09 08:00	EL	A
Final pH	5.66		pH_Units	SW846 1311	9/4/09 08:00	EL	A
Preliminary pH after DI water	9.89		pH_Units	SW846 1311	9/4/09 08:00	EL	A
Preliminary pH after HCl	2.57		pH_Units	SW846 1311	9/4/09 08:00	EL	A

### Site Comments:

The ASTM leachate was filtered through a 0.6 to 0.8 micron pore size filter after rotation.



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ANALYTICAL RESULTS

RECEIVED  
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Workorder 9807057 09-7889

Lab ID: 9807057001

Date Collected: 9/2/2009 07:40

Matrix: Solid

Sample ID: Biosolids, 09-7889

Date Received: 9/2/2009 16:38

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed By	Cntr
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Anna G Milliken

Laboratory Manager



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**ANALYTICAL RESULTS QUALIFIERS\FLAGS**

Workorder 9807057 09-7889

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**PARAMETER QUALIFIERS\FLAGS**

- [1] The leachate blank associated with this sample contained 43 mg/L total solids.
- [2] According to Pa/USEPA regulations, this sample is not considered to be ignitable. (Ref 40 CFR 261.21)
- [3] The solid pH measured in water was 8.082 at 22.0 degrees C.



Form 43 and Form U analysis updated 9/12/07

Total Metals: Arsenic, barium, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, silver, zinc

pH

Ignitability

Reactive Sulfide and Reactive Cyanide

Free Liquids

PCB's

Total solids

Total volatile solids

Oil and Grease and Total Petroleum Hydrocarbons

ASTM – report as mg/L

pH

COD

TS

Oil and Grease and petroleum hydrocarbons

Ammonia-Nitrogen

TCLP – include all parameters found in 40 CFR 261.24 as well as pH of extract.

Report all results in mg/L

pH of extract

Barium

Chromium

Iron

Mercury

Selenium

Zinc

Cresol

2,4-Dinitrotoluene

Hexachlorobutadiene

Pentachlorophenol

2,4,5-Trichlorophenol

Benzene

Chlorobenzene

1,2-Dichloroethane

Tetrachloroethylene

Chlordane

Endrin

Lindane

Toxaphene

Methyl ethyl ketone (2- Butanone)

Trichloroethylene

Arsenic

Cadmium

Copper

Lead

Nickel

Silver

o,m,p Cresols

1,4-Dichlorobenzene

Hexachlorobenzene

Hexachloroethane

Pyridine

2,4,6-Trichlorophenol

Carbon Tetrachloride

Chloroform

1,1-Dichloroethylene

Vinyl Chloride

2,4-D

Heptachlor (and its Epoxide)

Methoxychlor

2,4,5-TP (Silvex)

Nitrobenzene

Pyridine

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## ANALYTICAL RESULTS

RECEIVED  
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Workorder 9817002 09-9900

Lab ID: 9817002001

Date Collected: 11/4/2009 07:30

Matrix: Solid

Sample ID: Beltpress Sludge 09-9900

Date Received: 11/4/2009 17:30

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
<b>SEMIVOLATILES</b>									
Acenaphthene	ND		ug/kg	258	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
Acenaphthylene	ND		ug/kg	258	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
Anthracene	ND		ug/kg	258	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
Benzidine	ND		ug/kg	5150	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
Benzo(a)anthracene	ND		ug/kg	258	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
Benzo(a)pyrene	ND		ug/kg	1290	SW846 8270D	11/9/09 KAK	11/16/09 15:08	AJL	A3
Benzo(b)fluoranthene	ND		ug/kg	1290	SW846 8270D	11/9/09 KAK	11/16/09 15:08	AJL	A3
Benzo(g,h,i)perylene	ND		ug/kg	1290	SW846 8270D	11/9/09 KAK	11/16/09 15:08	AJL	A3
Benzo(k)fluoranthene	ND		ug/kg	1290	SW846 8270D	11/9/09 KAK	11/16/09 15:08	AJL	A3
4-Bromophenyl-phenylether	ND		ug/kg	515	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
Butylbenzylphthalate	2400		ug/kg	515	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
4-Chloro-3-methylphenol	ND		ug/kg	1390	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
Bis(2-Chloroethoxy)methane	ND		ug/kg	515	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
Bis(2-Chloroethyl)ether	ND		ug/kg	515	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
Bis(2-Chloroisopropyl)ether	ND		ug/kg	515	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
Chloronaphthalene	ND		ug/kg	515	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
2-Chlorophenol	ND		ug/kg	1390	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
4-Chlorophenyl-phenylether	ND		ug/kg	515	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
Chrysene	ND		ug/kg	258	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
Di-n-Butylphthalate	ND		ug/kg	515	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
Di-n-Octylphthalate	ND		ug/kg	1390	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
Dibenzo(a,h)anthracene	ND		ug/kg	1290	SW846 8270D	11/9/09 KAK	11/16/09 15:08	AJL	A3
1,2-Dichlorobenzene	ND		ug/kg	515	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
1,3-Dichlorobenzene	ND		ug/kg	515	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
1,4-Dichlorobenzene	ND		ug/kg	515	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
3,3-Dichlorobenzidine	ND		ug/kg	2780	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
2,4-Dichlorophenol	ND		ug/kg	1390	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
Diethylphthalate	ND		ug/kg	515	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
2,4-Dimethylphenol	ND		ug/kg	1390	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
Dimethylphthalate	ND		ug/kg	515	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
2,4-Dinitrophenol	ND		ug/kg	2780	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
2,4-Dinitrotoluene	ND		ug/kg	515	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
2,6-Dinitrotoluene	ND		ug/kg	515	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
1,2-Diphenylhydrazine	ND		ug/kg	515	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
bis(2-Ethylhexyl)phthalate	28500		ug/kg	2580	SW846 8270D	11/9/09 KAK	11/16/09 15:08	AJL	A3
Fluoranthene	675		ug/kg	258	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
Fluorene	304		ug/kg	258	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
Hexachlorobenzene	ND		ug/kg	515	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
Hexachlorobutadiene	ND		ug/kg	515	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
Hexachlorocyclopentadiene	ND		ug/kg	1390	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
Hexachloroethane	ND		ug/kg	515	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
Indeno(1,2,3-cd)pyrene	ND		ug/kg	1290	SW846 8270D	11/9/09 KAK	11/16/09 15:08	AJL	A3
Isophorone	ND		ug/kg	515	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
2-Methyl-4,6-dinitrophenol	ND		ug/kg	1390	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
Naphthalene	1990		ug/kg	258	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3
Nitrobenzene	ND		ug/kg	515	SW846 8270D	11/9/09 KAK	11/14/09 05:09	CGS	A3



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## ANALYTICAL RESULTS

Workorder 9817002 09-9900

Lab ID: 9817002001

Date Collected: 11/4/2009 07:30

Matrix: Solid

Sample ID: Beltpress Sludge 09-9900

Date Received: 11/4/2009 17:30

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Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed By	Cntr
2-Nitrophenol	ND		ug/kg	1390	SW846 8270D	11/9/09 KAK	11/14/09 05:09 CGS	A3
4-Nitrophenol	ND		ug/kg	1390	SW846 8270D	11/9/09 KAK	11/14/09 05:09 CGS	A3
N-Nitrosodimethylamine	ND		ug/kg	515	SW846 8270D	11/9/09 KAK	11/14/09 05:09 CGS	A3
N-Nitroso-di-n-propylamine	ND		ug/kg	515	SW846 8270D	11/9/09 KAK	11/14/09 05:09 CGS	A3
N-Nitrosodiphenylamine	ND		ug/kg	515	SW846 8270D	11/9/09 KAK	11/14/09 05:09 CGS	A3
Pentachlorophenol	ND		ug/kg	2780	SW846 8270D	11/9/09 KAK	11/14/09 05:09 CGS	A3
Phenanthrene	1040		ug/kg	258	SW846 8270D	11/9/09 KAK	11/14/09 05:09 CGS	A3
Phenol	ND		ug/kg	1390	SW846 8270D	11/9/09 KAK	11/14/09 05:09 CGS	A3
Pyrene	645		ug/kg	258	SW846 8270D	11/9/09 KAK	11/14/09 05:09 CGS	A3
1,2,4-Trichlorobenzene	ND		ug/kg	515	SW846 8270D	11/9/09 KAK	11/14/09 05:09 CGS	A3
2,4,6-Trichlorophenol	ND		ug/kg	1390	SW846 8270D	11/9/09 KAK	11/14/09 05:09 CGS	A3
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared By	Analyzed By	Cntr
2,4,6-Tribromophenol (S)	59.6		%	37-123	SW846 8270D	11/9/09 KAK	11/14/09 05:09 CGS	A3
2-Fluorobiphenyl (S)	53.4		%	45-105	SW846 8270D	11/9/09 KAK	11/14/09 05:09 CGS	A3
Nitrobenzene-d5 (S)	54.6		%	41-110	SW846 8270D	11/9/09 KAK	11/14/09 05:09 CGS	A3
Phenyl-d14 (S)	72.4		%	38-113	SW846 8270D	11/9/09 KAK	11/14/09 05:09 CGS	A3
Phenol-d5 (S)	53.4		%	40-100	SW846 8270D	11/9/09 KAK	11/14/09 05:09 CGS	A3
2-Fluorophenol (S)	50.9		%	35-104	SW846 8270D	11/9/09 KAK	11/14/09 05:09 CGS	A3
2,4,6-Tribromophenol (S)	54.4		%	37-123	SW846 8270D	11/9/09 KAK	11/16/09 15:08 AJL	A3
Terphenyl-d14 (S)	36.5		%	38-113	SW846 8270D	11/9/09 KAK	11/16/09 15:08 AJL	A3
Phenol-d5 (S)	51.6		%	40-100	SW846 8270D	11/9/09 KAK	11/16/09 15:08 AJL	A3
Nitrobenzene-d5 (S)	47.9		%	41-110	SW846 8270D	11/9/09 KAK	11/16/09 15:08 AJL	A3
2-Fluorophenol (S)	49.4		%	35-104	SW846 8270D	11/9/09 KAK	11/16/09 15:08 AJL	A3
2-Fluorobiphenyl (S)	52		%	45-105	SW846 8270D	11/9/09 KAK	11/16/09 15:08 AJL	A3

### WET CHEMISTRY

Ammonia-nitrogen, Total	7530		mg/kg	141	SM4500D	11/6/09 KAS	11/7/09 04:40 JJS	A2
Biochemical Oxygen Demand	54000		mg/kg	10.3	SM20-5210B		11/5/09 02:07 MLM	A
Color, Apparent	Brown				In-House		11/18/09 11:00 NJA	A
Cyanide, Total	7.4		mg/kg	1.3	SW846 9012B	11/5/09 KEP	11/6/09 09:45 KLR	A
Cyanide, Weak/Dissociable (Free)	ND		mg/kg	1.3	SM20-4500CNI	11/10/09 KEP	11/10/09 14:30 KEP	A4
Hexane Extractable Material	57400		mg/kg	981	SW846 9071B		11/12/09 08:00 JJS	A
Layering	None				In-House		11/18/09 11:00 NJA	A
Moisture	80.6		%	0.1	SM20-2540 G		11/5/09 05:15 KMW	A
Number of Phases	1				In-House		11/18/09 11:00 NJA	A
Odor	Sludge				In-House		11/18/09 11:00 NJA	A
Phenolics	14.6	1	mg/kg	1.7	SW846 9066	11/6/09 KRK	11/6/09 04:25 KRK	A
Phosphorus, Total	20100		mg/kg	502	EPA 365.1	11/11/09 KRK	11/13/09 02:12 KRK	A5
Physical State	Solid				In-House		11/18/09 11:00 NJA	A
Silica Gel Treated HEM	20200		mg/kg	981	SW846 9071B*		11/12/09 08:00 JJS	A
Total Solids	19.4		%	0.1	SM20-2540 G		11/5/09 05:15 KMW	A

### ME S

Arsenic, Total	ND		mg/kg	9.5	SW846 6010C	11/5/09 MNP	11/10/09 06:04 SRT	A1
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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

NOV 23 2009

DEPT. OF PUBLIC WORKS

Workorder 9817002 09-9900

Lab ID: 9817002001

Date Collected: 11/4/2009 07:30

Matrix: Solid

Sample ID: Beltpress Sludge 09-9900

Date Received: 11/4/2009 17:30

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed By	Cntr
Cadmium, Total	3.6		mg/kg	2.4	SW846 6010C	11/5/09 MNP	11/10/09 06:04	SRT A1
Chromium, Total	128		mg/kg	4.8	SW846 6010C	11/5/09 MNP	11/10/09 06:04	SRT A1
Copper, Total	467		mg/kg	9.5	SW846 6010C	11/5/09 MNP	11/10/09 06:04	SRT A1
Lead, Total	256		mg/kg	9.5	SW846 6010C	11/5/09 MNP	11/10/09 06:04	SRT A1
Mercury, Total	5.1		mg/kg	1.0	SW846 7471B	11/16/09 BLB	11/16/09 11:17	BLB A6
Molybdenum, Total	43.2		mg/kg	9.5	SW846 6010C	11/5/09 MNP	11/10/09 06:04	SRT A1
Nickel, Total	53.5		mg/kg	9.5	SW846 6010C	11/5/09 MNP	11/10/09 06:04	SRT A1
Silver, Total	13.6		mg/kg	2.4	SW846 6010C	11/5/09 MNP	11/10/09 06:04	SRT A1
Zinc, Total	1280		mg/kg	9.5	SW846 6010C	11/5/09 MNP	11/10/09 06:04	SRT A1

**Sample Comments:**

Matrix interferences were present in this sample which caused one or more surrogates to be recovered outside of the laboratory established control limits for the GC/MS analysis.

Anna G Milliken

Laboratory Manager





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NOV 23 2009

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Workorder 9817002 09-9900

PARAMETER QUALIFIERS\FLAGS

- [1] The recovery of the Matrix Spike (MS) associated to this analyte was outside of the established control limits.



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ANALYTICAL RESULTS

RECEIVED

DEC 17 2009

DEPT. OF PUBLIC WORKS

Workorder 9822240 09-10995

Lab ID: 9822240001

Date Collected: 12/8/2009 09:15

Matrix: Solid

Sample ID: Belt Press Sludge 09-10995

Date Received: 12/9/2009 16:35

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
<b>WET CHEMISTRY</b>									
Moisture	80.9		%	0.1	SM20-2540 G		12/10/09 05:15	LJF	A
Total Solids	19.1		%	0.1	SM20-2540 G		12/10/09 05:15	LJF	A
<b>METALS</b>									
Chromium, Total	110		mg/kg	4.7	SW846 6010C	12/10/09 MNP	12/11/09 06:08	SRT	A1
Lead, Total	166		mg/kg	9.4	SW846 6010C	12/10/09 MNP	12/11/09 06:08	SRT	A1

Sample Comments:

  
Anna G Milliken  
Laboratory Manager



## Analysis Report for Use of Biosolids on Cropland

<p>Amy Morriss City of Reading WWTP 815 Washington St Reading PA 19601</p> <p style="text-align: center; font-weight: bold; font-size: 1.2em;">RECEIVED</p> <p style="text-align: center; font-weight: bold; font-size: 1.2em;">FEB 03 2009</p> <p style="text-align: center;">DEPT. OF PUBLIC WORKS</p>	<p>Lab Sample ID: E13192 Date Received: January 9, 2009 Date Sampled: 1/5-6/09 Report Date: 1/23/09 Sample type: Composite County: Berks Customer Sample ID: 09-185</p>
--	---

### RESULTS

pH	Solids	Volatile	Tot-N	Org-N	NH <sub>4</sub> N	P	K	Mg	Ca	Na	Fe	Al
@ 22.1	— % —					% (dry weight basis)						
7.6	19.60	70.16	5.18	4.56	0.62	1.80	0.10	0.35	3.76	0.08	1.20	0.81
Mn	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn	PCB	Reactive CN
mg/kg (dry weight basis)												
3936.7	2.85	3.75	120.8	565.1	116.6	5.17	57.6	70.6	8.28	1568.2	< .54	< 2

NR-Not Requested      One dry ton of this material is equivalent to      1224   gallons of wet material or      5.1   tons of wet material

### PRIMARY NUTRIENT CONTENT

% (dry wt basis)

N	5.18	0.96	dry tons of this biosolid will supply 100 lbs of total N.
P <sub>2</sub> O <sub>5</sub>	4.13	2.77	dry tons of this biosolid will supply 100 lbs of P
K <sub>2</sub> O	0.12		

### ANALYSIS INFORMATION FOR EPA 503 POLLUTANTS

Analyte	EPA SW-846 Method	Analyst	Date	Time
Cd,Cu,Mo,Pb,Ni,Zn	3050B + 6010	Stecko	1/16/2009	9:20:46
As	3050B + 6010	Stecko	1/16/2009	9:20:46
Se	3050B + 6010	Stecko	1/16/2009	9:20:46
Hg	7473	Kline	01/15/2009	8:49am
PCBs <sup>1</sup>	8082			

<sup>1</sup>Subcontracted to Fairway Laboratories, Inc., Altoona, PA

### RAW LABORATORY BENCH DATA FOR EPA 503 POLLUTANTS

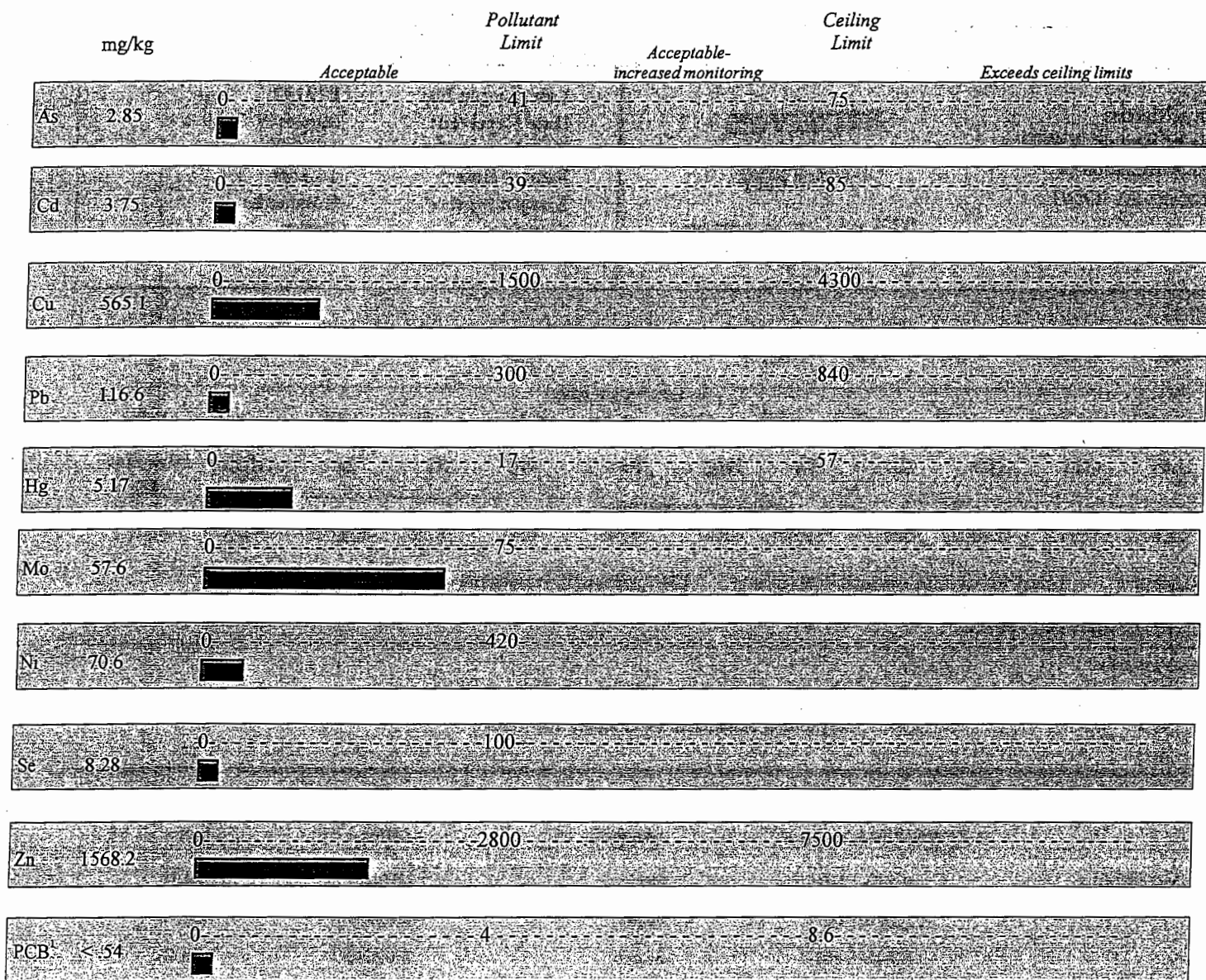
	As	Cd	Cu	Hg	Mo	Ni	Pb	Se	Zn
Wet Wt. aliquot (g)	1.969	1.969	1.969	0.310	1.969	1.969	1.969	1.969	1.969
Analyte conc. in sample/ digest (mg/L except Hg)	0.022	0.029	4.36	0.314 ug	0.44	0.54	0.90	0.06	12.10
Method limit (mg/L except Hg)	0.015	0.005	0.015	0.0004 ug	0.015	0.005	0.020	0.015	0.008

### Optional Analyses: Results (except soluble salts) on dry weight basis

### Sample Receipt

Nit N (mg/kg)	Total Carbon (%)	CCE Calcium Carbonate Equivalent (%)	Soluble Salts (mmhos/cm)	Other:	

**EPA REGULATIONS FOR LAND APPLICATION OF BIOSOLIDS (40 CFR Part 503) and  
DEP GUIDELINES FOR USE OF BIOSOLIDS FOR AGRICULTURAL UTILIZATION**



<sup>1</sup>DEP limit only



## Analysis Report for Use of Biosolids on Cropland

<p>Amv Morriss City of Reading WWTP 815 Washington St Reading PA 19601</p> <p style="text-align: center; font-weight: bold; font-size: 1.2em;">RECEIVED</p> <p style="text-align: center; font-weight: bold; font-size: 1.2em;">MAR 04 2009</p> <p style="text-align: center; font-weight: bold;">DEPT. OF PUBLIC WORKS</p>	<p>Lab Sample ID: E13237 Date Received: February 5, 2009 Date Sampled: 2/4/09 Report Date: 2/25/09 Sample type: Composite County: Berks Customer Sample ID: 09-1054</p>
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RESULTS												
pH	Solids	Volatile	Tot-N	Org-N	NH <sub>4</sub> N	P	K	Mg	Ca	Na	Fe	Al
@ 23.5	— % —					% (dry weight basis)						
7.7	18.43	69.75	5.67	5.08	0.59	1.99	0.11	0.39	4.77	0.11	1.13	0.73
Mn	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn	PCB	Reactive CN
mg/kg (dry weight basis)												
6619.9	2.52	3.97	114.8	525.5	129.3	3.38	52.6	65.0	12.29	1477.8	< 1.47	< 3

NR-Not Requested      One dry ton of this material is equivalent to      1301 gallons of wet material or      5.4 tons of wet material

PRIMARY NUTRIENT CONTENT			
% (dry wt basis)			
T N	5.67	0.88	dry tons of this biosolid will supply 100 lbs of total N.
P <sub>2</sub> O <sub>5</sub>	4.56	2.51	dry tons of this biosolid will supply 100 lbs of P
K <sub>2</sub> O	0.13		

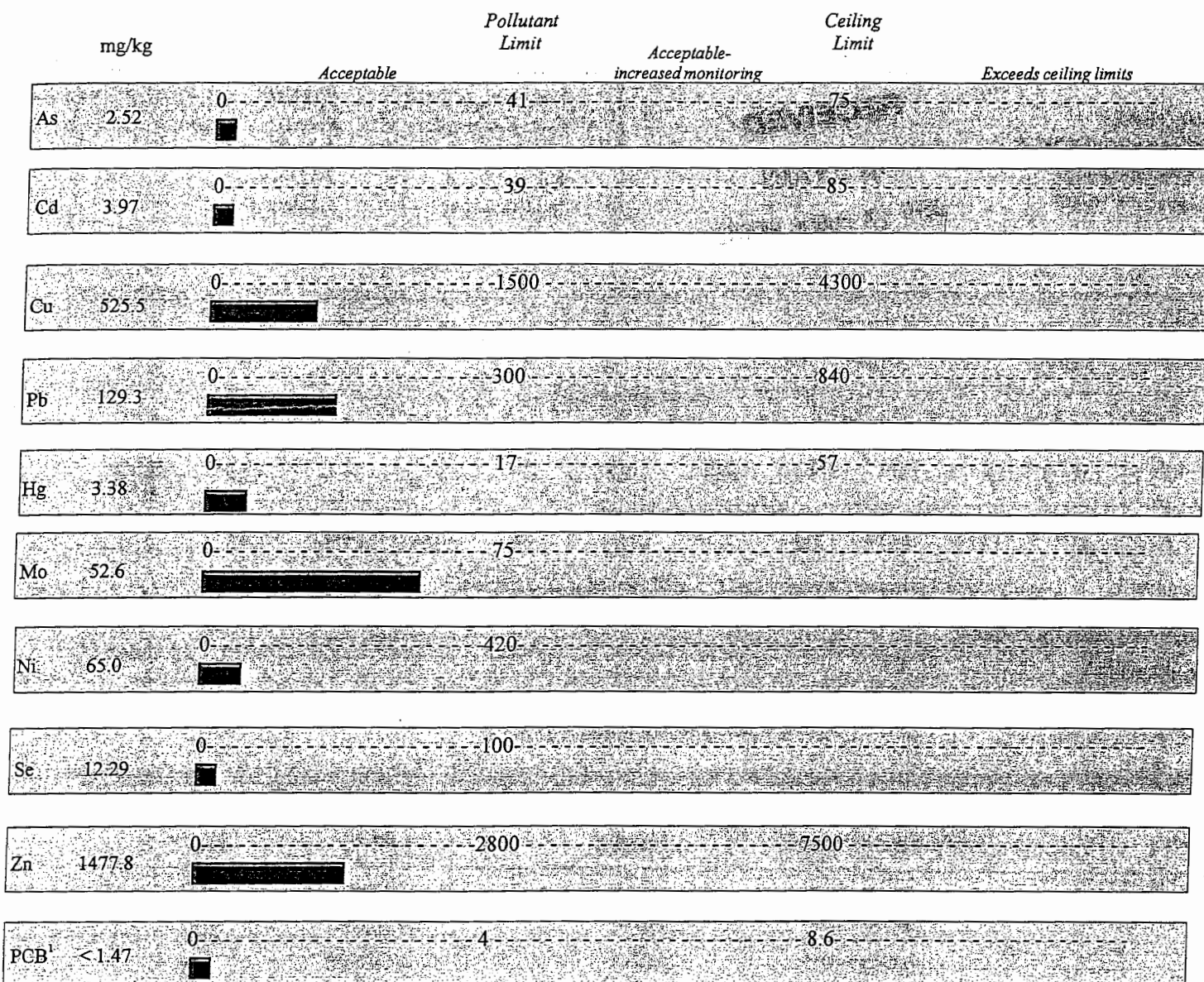
ANALYSIS INFORMATION FOR EPA 503 POLLUTANTS				
Analyte	EPA SW-846 Method	Analyst	Date	Time
Cd,Cu,Mo,Pb,Ni,Zn	3050B + 6010	Stecko	2/13/2009	8:54:56
As	3050B + 6010	Stecko	2/13/2009	8:54:56
Se	3050B + 6010	Stecko	2/13/2009	8:54:56
Hg	7473	Kline	02/12/2009	9:44am
PCBs <sup>1</sup>	8082			

<sup>1</sup>Subcontracted to Fairway Laboratories, Inc., Altoona, PA

RAW LABORATORY BENCH DATA FOR EPA 503 POLLUTANTS									
	As	Cd	Cu	Hg	Mo	Ni	Pb	Se	Zn
Wet Wt. aliquot (g)	1.639	1.639	1.639	0.399	1.639	1.639	1.639	1.639	1.639
Analyte conc. in sample/ digest (mg/L except Hg)	0.015	0.024	3.17	0.248 ug	0.32	0.39	0.78	0.07	8.93
Method limit (mg/L except Hg)	0.015	0.005	0.015	0.0010 ug	0.015	0.005	0.020	0.015	0.008

Optional Analyses: Results (except soluble salts) on dry weight basis					Sample Receipt
Vitrac <sup>®</sup> (mg/L)	Total Carbon (%)	CCE Calcium Carbonate Equivalent (%)	Soluble Salts (mmhos/cm)	Other:	Ambient Temperature

EPA REGULATIONS FOR LAND APPLICATION OF BIOSOLIDS (40 CFR Part 503) and  
DEP GUIDELINES FOR USE OF BIOSOLIDS FOR AGRICULTURAL UTILIZATION



<sup>1</sup>DEP limit only



## Analysis Report for Use of Biosolids on Cropland

<p>Amv Morriss City of Reading WWTP 815 Washington St Reading PA 19601</p>	<p><b>RECEIVED</b> <b>APR 02 2009</b> <b>DEPT. OF PUBLIC WORKS</b></p>	<b>Lab Sample ID:</b>	E13300
		<b>Date Received:</b>	March 9, 2009
		<b>Date Sampled:</b>	3/4/09
		<b>Report Date:</b>	3/24/09
		<b>Sample type:</b>	Composite
		<b>County:</b>	Berks
		<b>Customer Sample ID:</b>	Biosolids

### RESULTS

pH	Solids	Volatile	Tot-N	Org-N	NH <sub>4</sub> N	P	K	Mg	Ca	Na	Fe	Al
@ 23.7	— % —											
7.8	18.49	68.34	5.77	5.22	0.55	1.90	0.10	0.35	4.60	0.11	0.95	0.66
Mn	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn	PCB	Reactive CN
6641.3	< 2.94	3.21	104.7	522.1	106.6	2.45	54.8	59.7	7	1288.3	< 1.46	< 3

NR-Not Requested      One dry ton of this material is equivalent to      1297      gallons of wet material or      5.4      tons of wet material

### PRIMARY NUTRIENT CONTENT

% (dry wt basis)

al N	5.77	0.87	dry tons of this biosolid will supply 100 lbs of total N.
P <sub>2</sub> O <sub>5</sub>	4.34	2.64	dry tons of this biosolid will supply 100 lbs of P
K <sub>2</sub> O	0.12		

### ANALYSIS INFORMATION FOR EPA 503 POLLUTANTS

Analyte	EPA SW-846 Method	Analyst	Date	Time
Cd,Cu,Mo,Pb,Ni,Zn	3050B + 6010	Stecko	3/13/2009	8:56:40
As	3050B + 6010	Stecko	3/13/2009	8:56:40
Se	3050B + 6010	Stecko	3/13/2009	8:56:40
Hg	7473	Kline	03/12/2009	9:44AM
PCBs <sup>1</sup>	8082			

<sup>1</sup>Subcontracted to Fairway Laboratories, Inc., Altoona, PA

### RAW LABORATORY BENCH DATA FOR EPA 503 POLLUTANTS

	As	Cd	Cu	Hg	Mo	Ni	Pb	Se	Zn
Wet Wt. aliquot (g)	1.378	1.378	1.378	0.444	1.378	1.378	1.378	1.378	1.378
Analyte conc. in sample/ digest (mg/L except Hg)	0.011	0.016	2.66	0.201 ug	0.28	0.30	0.54	0.04	6.57
Method limit (mg/L except Hg)	0.015	0.005	0.015	0.0010 ug	0.015	0.005	0.020	0.015	0.008

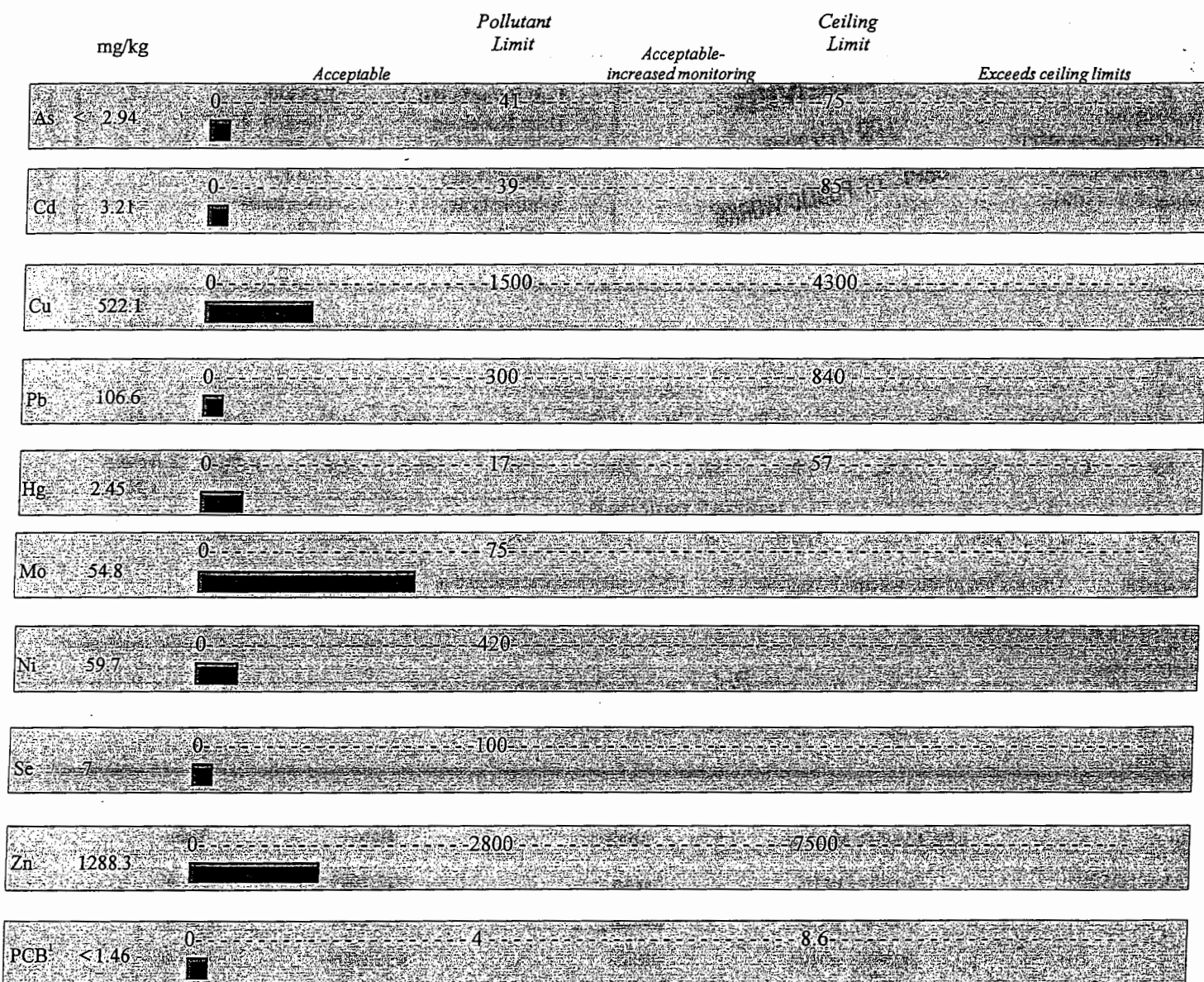
### Optional Analyses: Results (except soluble salts) on dry weight basis

### Sample Receipt

N	Total Carbon	CCE	Soluble Salts	Other:	Ambient Temperature
3-N (mg/kg)	(%)	Calcium Carbonate Equivalent (%)	(mmhos/cm)		



EPA REGULATIONS FOR LAND APPLICATION OF BIOSOLIDS (40 CFR Part 503) and  
DEP GUIDELINES FOR USE OF BIOSOLIDS FOR AGRICULTURAL UTILIZATION



<sup>1</sup>DEP limit only





# Analysis Report for Use of Biosolids on Cropland

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MAY 05 2009  
DEPT. OF PUBLIC WORKS

Amy Morriss  
City of Reading WWTP  
815 Washington St  
Reading PA 19601

Lab Sample ID: E13372  
Date Received: April 10, 2009  
Date Sampled: 4/8/09  
Report Date: 4/28/09  
Sample type: Composite  
County: Berks  
Customer Sample ID: 09-3030

## RESULTS

pH	Solids	Volatile	Tot-N	Org-N	NH <sub>4</sub> N	P	K	Mg	Ca	Na	Fe	Al
@ 23.7	— % —											
7.9	19.33	71.58	5.26	4.67	0.58	1.89	0.11	0.39	4.21	0.10	1.06	0.72
Mn	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn	PCB	Reactive CN
4881.0	4.27	4.39	109.6	504.4	127.5	2.39	49.4	65.4	9.32	1448.7	< 1.41	< 2

NR-Not Requested One dry ton of this material is equivalent to 1241 gallons of wet material or 5.2 tons of wet material

## PRIMARY NUTRIENT CONTENT

% (dry wt basis)

T N	5.26	0.95	dry tons of this biosolid will supply 100 lbs of total N.
P <sub>2</sub> O <sub>5</sub>	4.32	2.65	dry tons of this biosolid will supply 100 lbs of P
K <sub>2</sub> O	0.13		

## ANALYSIS INFORMATION FOR EPA 503 POLLUTANTS

Analyte	EPA SW-846 Method	Analyst	Date	Time
Cd,Cu,Mo,Pb,Ni,Zn	3050B + 6010	Stecko	4/17/2009	9:52:57
As	3050B + 6010	Stecko	4/17/2009	9:52:57
Se	3050B + 6010	Stecko	4/17/2009	9:52:57
Hg	7473	Kline	04/16/2009	10:12am
PCBs <sup>1</sup>	8082			

<sup>1</sup>Subcontracted to Fairway Laboratories, Inc., Altoona, PA

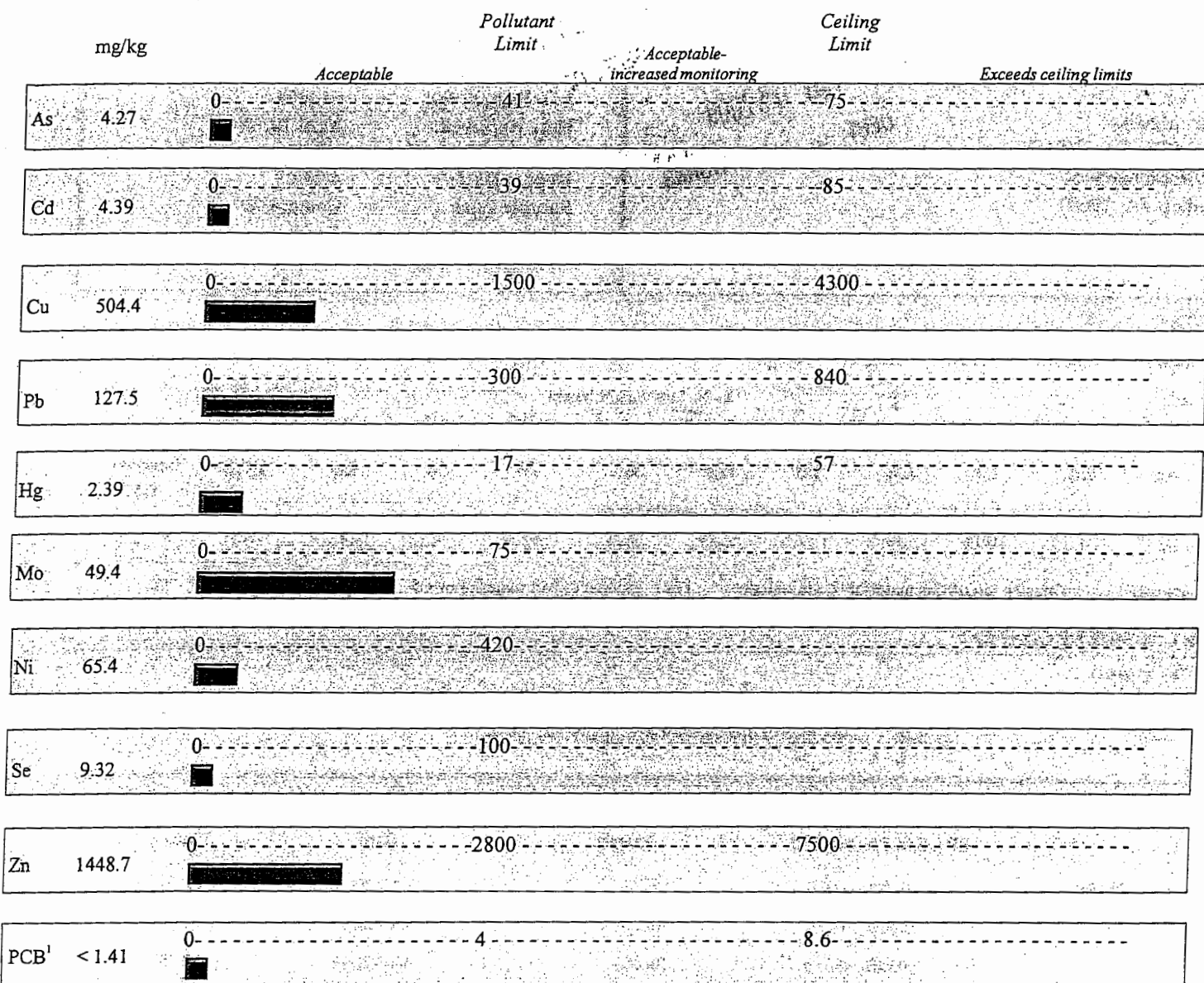
## RAW LABORATORY BENCH DATA FOR EPA 503 POLLUTANTS

	As	Cd	Cu	Hg	Mo	Ni	Pb	Se	Zn
Wet Wt. aliquot (g)	1.570	1.570	1.570	0.394	1.570	1.570	1.570	1.570	1.570
Analyte conc. in sample/digest (mg/L except Hg)	0.026	0.027	3.06	0.182 ug	0.30	0.40	0.77	0.06	8.79
Method limit (mg/L except Hg)	0.015	0.005	0.015	0.0010 ug	0.015	0.005	0.020	0.015	0.008

## Optional Analyses: Results (except soluble salts) on dry weight basis

	Total Carbon (%)	CCE Calcium Carbonate Equivalent (%)	Soluble Salts (mmhos/cm)	Other:	Sample Receipt
titrat mg/kg					Ambient Temperature

**EPA REGULATIONS FOR LAND APPLICATION OF BIOSOLIDS (40 CFR Part 503) and  
DEP GUIDELINES FOR USE OF BIOSOLIDS FOR AGRICULTURAL UTILIZATION**



<sup>1</sup>DEP limit only



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MAY 28 2009  
DEPT. OF PUBLIC WORKS

# Analysis Report for Use of Biosolids on Cropland

Amv Morriss  
City of Reading WWTP  
815 Washington St  
Reading PA 19601

Lab Sample ID: E13424  
Date Received: May 8, 2009  
Date Sampled: 5/6/09  
Report Date: 5/22/09  
Sample type: Composite  
County: Berks  
Customer Sample ID: BioSolids

## RESULTS

pH	Solids	Volatile	Tot-N	Org-N	NH <sub>4</sub> N	P	K	Mg	Ca	Na	Fe	Al
@ 23.2	— % —					% (dry weight basis)						
8.1	18.26	69.45	5.68	4.93	0.75	2.14	0.10	0.40	4.59	0.11	1.18	0.79
Mn	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn	PCB	Reactive CN
mg/kg (dry weight basis)												
6154.7	4.74	4.98	151.4	558.5	130.5	2.75	50.7	60.7	10.49	1625.3	< .59	< 2

NR-Not Requested      One dry ton of this material is equivalent to      1314   gallons of wet material or      5.5   tons of wet material

## PRIMARY NUTRIENT CONTENT

% (dry wt basis)		
N	5.68	0.88      dry tons of this biosolid will supply 100 lbs of total N.
P <sub>2</sub> O <sub>5</sub>	4.90	2.34      dry tons of this biosolid will supply 100 lbs of P
K <sub>2</sub> O	0.12	

## ANALYSIS INFORMATION FOR EPA 503 POLLUTANTS

Analyte	EPA SW-846 Method	Analyst	Date	Time
Cd,Cu,Mo,Pb,Ni,Zn	3050B + 6010	Stecko	5/18/2009	8:44:10
As	3050B + 6010	Stecko	5/18/2009	8:44:10
Se	3050B + 6010	Stecko	5/18/2009	8:44:10
Hg	7473	Kline	05/15/2009	10:11am
PCBs <sup>1</sup>	8082			

<sup>1</sup>Subcontracted to Fairway Laboratories, Inc., Altoona, PA

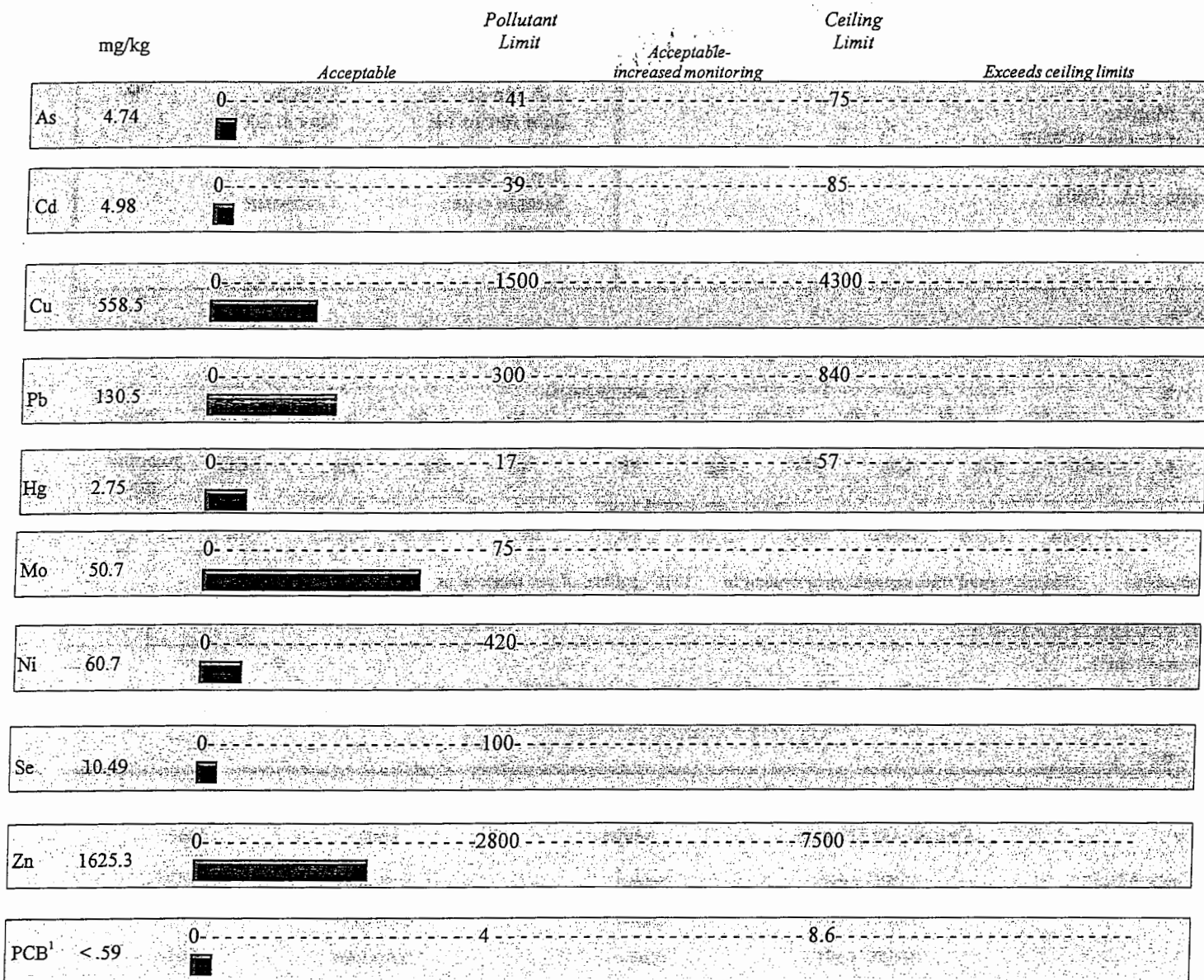
## RAW LABORATORY BENCH DATA FOR EPA 503 POLLUTANTS

	As	Cd	Cu	Hg	Mo	Ni	Pb	Se	Zn
Wet Wt. aliquot (g)	1.694	1.694	1.694	0.512	1.694	1.694	1.694	1.694	1.694
Analyte conc. in sample/ digest (mg/L except Hg)	0.029	0.031	3.45	0.258 ug	0.31	0.38	0.81	0.06	10.05
Method limit (mg/L except Hg)	0.015	0.005	0.015	0.0010 ug	0.015	0.005	0.020	0.015	0.008

## Optional Analyses: Results (except soluble salts) on dry weight basis

					Sample Receipt
Nitr J (mg/kg)	Total Carbon (%)	CCE Calcium Carbonate Equivalent (%)	Soluble Salts (mmhos/cm)	Other:	Ambient Temperature

**EPA REGULATIONS FOR LAND APPLICATION OF BIOSOLIDS (40 CFR Part 503) and  
DEP GUIDELINES FOR USE OF BIOSOLIDS FOR AGRICULTURAL UTILIZATION**



<sup>1</sup>DEP limit only



## Analysis Report for Use of Biosolids on Cropland

Amv Morriss  
City of Reading WWTP  
815 Washington St  
Reading PA 19601

**RECEIVED**

JUL 07 2009

DEPT. OF PUBLIC WORKS

Lab Sample ID: E13470  
Date Received: June 10, 2009  
Date Sampled: 6/2/09  
Report Date: 6/25/09  
Sample type: Composite  
County: Berks  
Customer Sample ID: Biosolids 09-4931

### RESULTS

pH	Solids	Volatile	Tot-N	Org-N	NH <sub>4</sub> N	P	K	Mg	Ca	Na	Fe	Al
@ 23.3	— % —					% (dry weight basis)						
7.9	17.23	70.29	6.02	5.25	0.77	2.16	0.11	0.40	3.86	0.11	1.08	0.70
Mn	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn	PCB	Reactive CN
mg/kg (dry weight basis)												
10233.2	5.01	4.16	110.8	496.9	113.7	2.71	38.6	51.0	14.45	1339.9	< 1.57	< 2

NR-Not Requested One dry ton of this material is equivalent to 1392 gallons of wet material or 5.8 tons of wet material

### PRIMARY NUTRIENT CONTENT

% (dry wt basis)

T-N	6.02	0.83	dry tons of this biosolid will supply 100 lbs of total N.
P <sub>2</sub> O <sub>5</sub>	4.95	2.31	dry tons of this biosolid will supply 100 lbs of P
K <sub>2</sub> O	0.14		

### ANALYSIS INFORMATION FOR EPA 503 POLLUTANTS

Analyte	EPA SW-846 Method	Analyst	Date	Time
Cd,Cu,Mo,Pb,Ni,Zn	3050B + 6010	Stecko	6/22/2009	10:21:06
As	3050B + 6010	Stecko	6/22/2009	10:21:06
Se	3050B + 6010	Stecko	6/22/2009	10:21:06
Hg	7473	Kline	06/18/2009	11:11am
PCBs <sup>1</sup>	8082			

<sup>1</sup>Subcontracted to Fairway Laboratories, Inc., Altoona, PA

### RAW LABORATORY BENCH DATA FOR EPA 503 POLLUTANTS

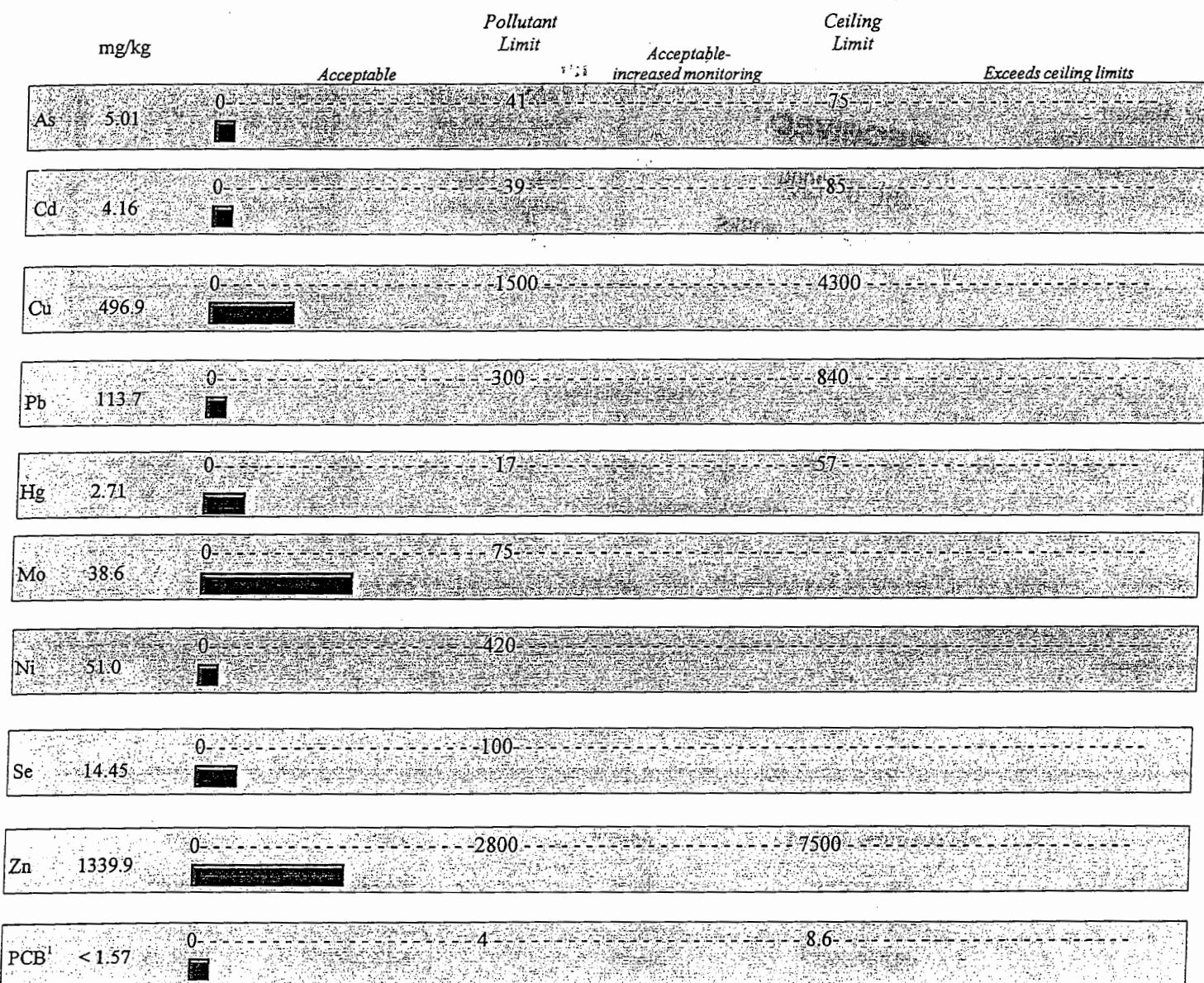
	As	Cd	Cu	Hg	Mo	Ni	Pb	Se	Zn
Wet Wt. aliquot (g)	1.398	1.398	1.398	0.308	1.398	1.398	1.398	1.398	1.398
Analyte conc. in sample/ digest (mg/L except Hg)	0.024	0.020	2.39	0.144 ug	0.19	0.25	0.55	0.07	6.45
Method limit (mg/L except Hg)	0.015	0.005	0.015	0.0010 ug	0.015	0.005	0.020	0.015	0.008

### Optional Analyses: Results (except soluble salts) on dry weight basis

### Sample Receipt

Nitrate-N (mg)	Total Carbon (%)	CCE Calcium Carbonate Equivalent (%)	Soluble Salts (mmhos/cm)	Other:	Ambient Temperature

**EPA REGULATIONS FOR LAND APPLICATION OF BIOSOLIDS (40 CFR Part 503) and  
DEP GUIDELINES FOR USE OF BIOSOLIDS FOR AGRICULTURAL UTILIZATION**



<sup>1</sup>DEP limit only





## Analysis Report for Use of Biosolids on Cropland

<p>Amv Morriss City of Reading WWTP 815 Washington St Reading PA 19601</p> <p><b>RECEIVED</b> AUG 24 2009</p>	<p><b>Lab Sample ID:</b> E13541 <b>Date Received:</b> July 16, 2009 <b>Date Sampled:</b> 7/13/09 <b>Report Date:</b> 7/29/09 <b>Sample type:</b> Composite <b>County:</b> Berks <b>Customer Sample ID:</b> Biosolids</p>
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### RESULTS

pH	Solids	Volatile	Tot-N	Org-N	NH <sub>4</sub> N	P	K	Mg	Ca	Na	Fe	Al
@ 23.2	— % —					% (dry weight basis)						
8.2	16.83	66.45	5.76	5.07	0.70	2.26	0.10	0.44	5.80	0.12	1.43	0.89
Mn	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn	PCB	Reactive CN
mg/kg (dry weight basis)												
7602.5	4.28	3.91	128.7	629.9	158.4	4.15	46.6	64.6	12.65	1840.9	< 1.6	< 3

NR-Not Requested      One dry ton of this material is equivalent to      1425 gallons of wet material or      5.9 tons of wet material

### PRIMARY NUTRIENT CONTENT

% (dry wt basis)		
T	5.76	0.87 dry tons of this biosolid will supply 100 lbs of total N.
P <sub>2</sub> O <sub>5</sub>	5.18	2.21 dry tons of this biosolid will supply 100 lbs of P
K <sub>2</sub> O	0.13	

### ANALYSIS INFORMATION FOR EPA 503 POLLUTANTS

Analyte	EPA SW-846 Method	Analyst	Date	Time
Cd,Cu,Mo,Pb,Ni,Zn	3050B + 6010	Stecko	7/23/2009	14:44:22
As	3050B + 6010	Stecko	7/23/2009	14:44:22
Se	3050B + 6010	Stecko	7/23/2009	14:44:22
Hg	7473	Wolf	07/23/2009	10:15 AM
PCBs <sup>1</sup>	8082			

<sup>1</sup>Subcontracted to Fairway Laboratories, Inc., Altoona, PA

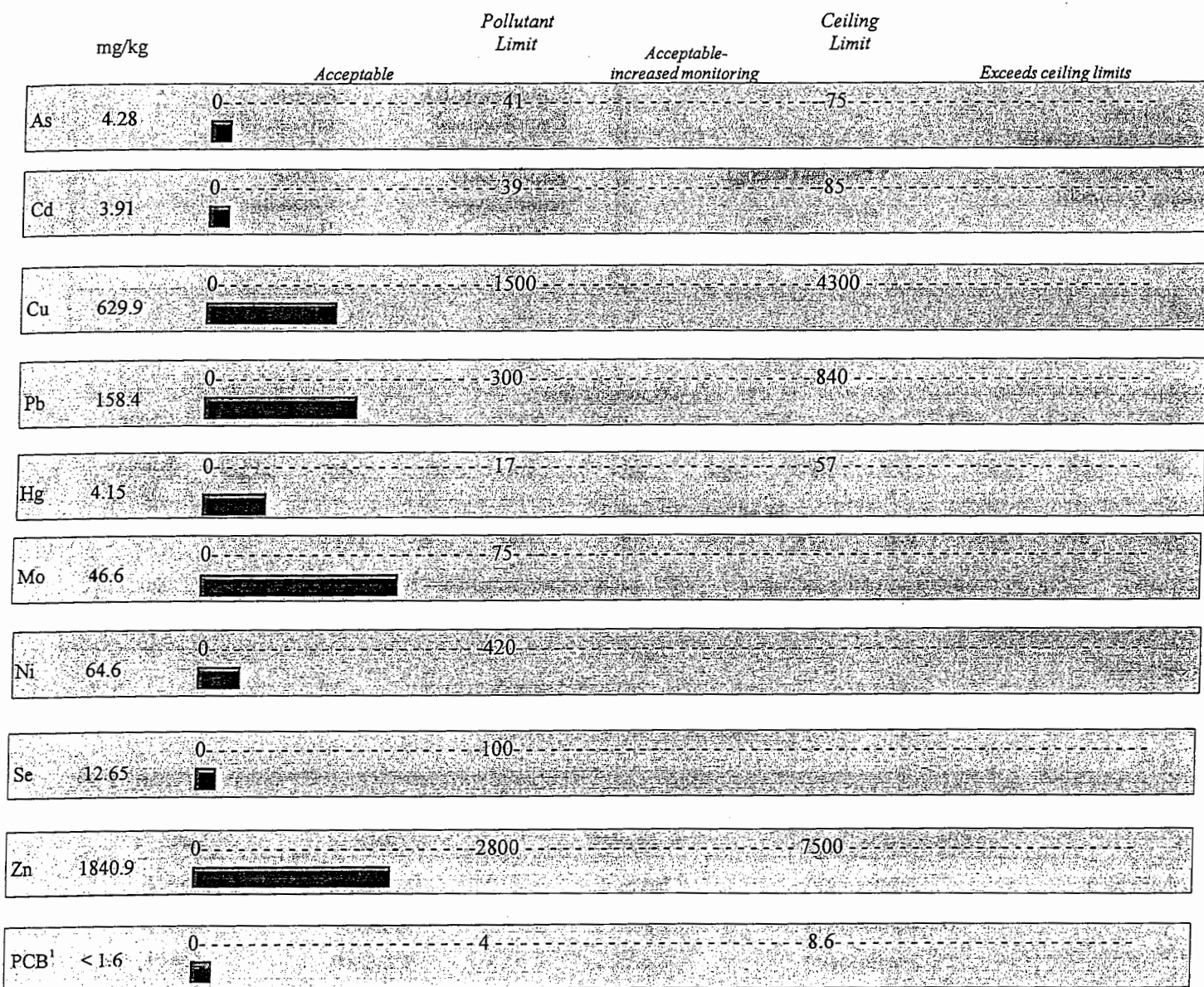
### RAW LABORATORY BENCH DATA FOR EPA 503 POLLUTANTS

	As	Cd	Cu	Hg	Mo	Ni	Pb	Se	Zn
Wet Wt. aliquot (g)	1.965	1.965	1.965	0.419	1.965	1.965	1.965	1.965	1.965
Analyte conc. in sample/ digest (mg/L except Hg)	0.028	0.026	4.17	0.293 ug	0.31	0.43	1.05	0.08	12.18
Method limit (mg/L except Hg)	0.015	0.005	0.015	0.0010 ug	0.015	0.005	0.020	0.015	0.008

### Optional Analyses: Results (except soluble salts) on dry weight basis

Optional Analyses: Results (except soluble salts) on dry weight basis					Sample Receipt
Nitrate (mg/kg)	Total Carbon (%)	CCE Calcium Carbonate Equivalent (%)	Soluble Salts (mmhos/cm)	Other:	Ambient Temperature

EPA REGULATIONS FOR LAND APPLICATION OF BIOSOLIDS (40 CFR Part 503) and  
DEP GUIDELINES FOR USE OF BIOSOLIDS FOR AGRICULTURAL UTILIZATION



<sup>1</sup>DEP limit only





## Analysis Report for Use of Biosolids on Cropland

Amy Morriss City of Reading WWTP 815 Washington St Reading PA 19601	<b>RECEIVED</b> SEP 18 2009 DEPT. OF PUBLIC WORKS	Lab Sample ID: E13589 Date Received: August 19, 2009 Date Sampled: 8/13/09 Report Date: 9/10/09 Sample type: County: Berks Customer Sample ID: Biosolids 09-7260
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### RESULTS

pH	Solids	Volatile	Tot-N	Org-N	NH <sub>4</sub> N	P	K	Mg	Ca	Na	Fe	Al
@ 23.5	— % —					% (dry weight basis)						
7.8	20.66	68.09	4.89	4.28	0.61	1.58	0.11	0.36	3.57	0.09	1.37	0.87
Mn	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn	PCB	Reactive CN
mg/kg (dry weight basis)												
4019.3	3.36	4.96	143.3	536.7	143.2	4.17	48.8	95.2	7.33	1426.8	< 1.29	< 2

NR-Not Requested      One dry ton of this material is equivalent to      1161 gallons of wet material or      4.8 tons of wet material

### PRIMARY NUTRIENT CONTENT

% (dry wt basis)		
T N	4.89	1.02 dry tons of this biosolid will supply 100 lbs of total N.
P <sub>2</sub> O <sub>5</sub>	3.61	3.17 dry tons of this biosolid will supply 100 lbs of P
K <sub>2</sub> O	0.13	

### ANALYSIS INFORMATION FOR EPA 503 POLLUTANTS

Analyte	EPA SW-846 Method	Analyst	Date	Time
Cd,Cu,Mo,Pb,Ni,Zn	3050B + 6010	Stecko	8/25/2009	10:39:11
As	3050B + 6010	Stecko	8/25/2009	10:39:11
Se	3050B + 6010	Stecko	8/25/2009	10:39:11
Hg	7473	Wolf	08/25/2009	10:00 AM
PCBs <sup>1</sup>	8082			

<sup>1</sup>Subcontracted to Fairway Laboratories, Inc., Altoona, PA

### RAW LABORATORY BENCH DATA FOR EPA 503 POLLUTANTS

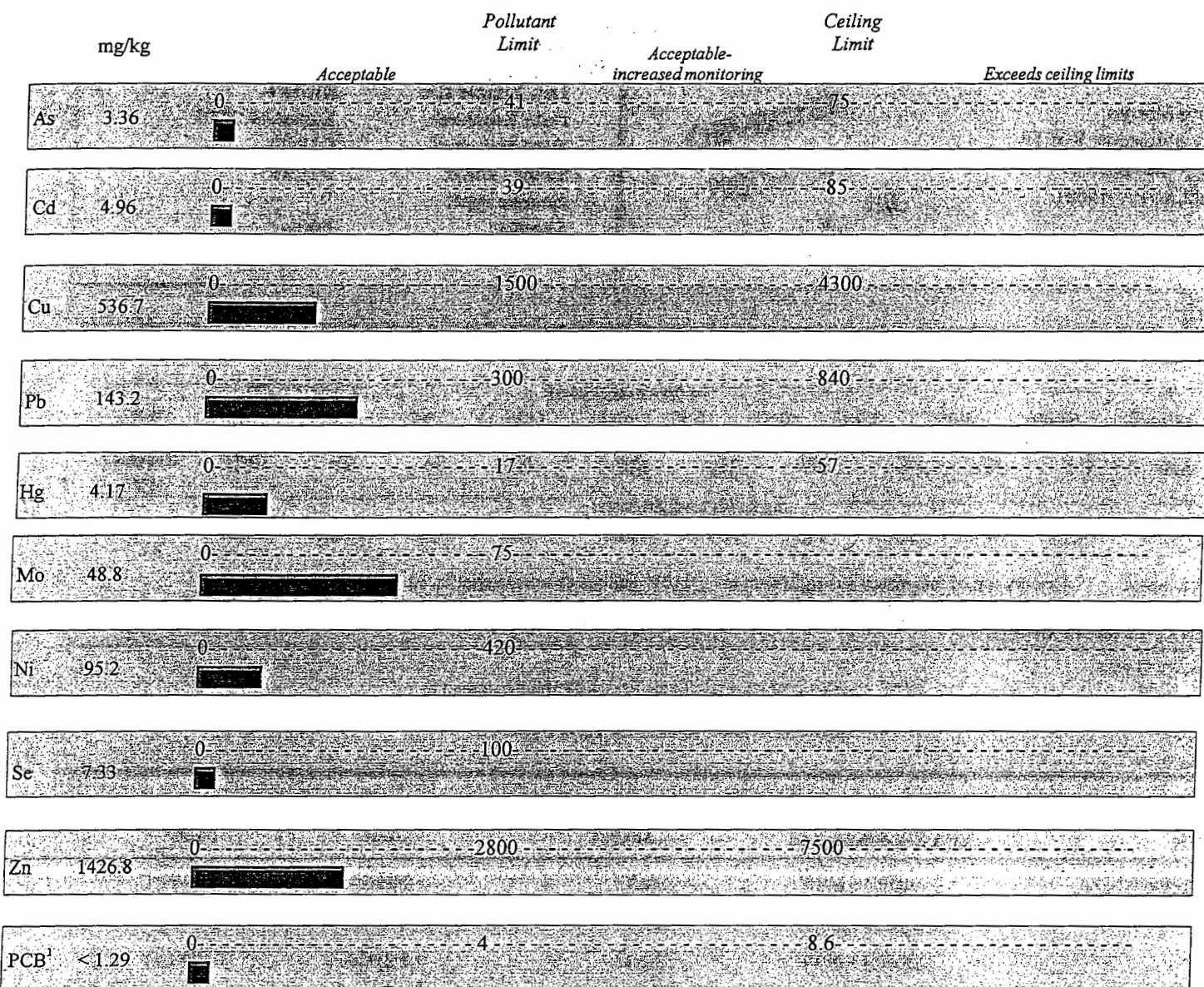
	As	Cd	Cu	Hg	Mo	Ni	Pb	Se	Zn
Wet Wt. aliquot (g)	2.036	2.036	2.036	0.386	2.036	2.036	2.036	2.036	2.036
Analyte conc. in sample/digest (mg/L except Hg)	0.028	0.042	4.52	0.333 ug	0.41	0.80	1.20	0.06	12.00
Method limit (mg/L except Hg)	0.015	0.005	0.015	0.0010 ug	0.015	0.005	0.020	0.015	0.008

### Optional Analyses: Results (except soluble salts) on dry weight basis

### Sample Receipt

Nitrogen (mg/g)	Total Carbon (%)	CCE Calcium Carbonate Equivalent (%)	Soluble Salts (mmhos/cm)	Other:	Ambient Temperature

**EPA REGULATIONS FOR LAND APPLICATION OF BIOSOLIDS (40 CFR Part 503) and  
DEP GUIDELINES FOR USE OF BIOSOLIDS FOR AGRICULTURAL UTILIZATION**



<sup>1</sup>DEP limit only



## Analysis Report for Use of Biosolids on Cropland

<p>Amv Morriss City of Reading WWTP 815 Washington St Reading PA 19601</p>	<div style="text-align: center; font-weight: bold; transform: rotate(-15deg);"> RECEIVED OCT 05 2009 DEPT. OF PUBLIC WORKS </div> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Lab Sample ID:</td> <td>E13617</td> </tr> <tr> <td>Date Received:</td> <td>September 9, 2009</td> </tr> <tr> <td>Date Sampled:</td> <td>9/1/09</td> </tr> <tr> <td>Report Date:</td> <td>9/29/09</td> </tr> <tr> <td>Sample type:</td> <td>Composite</td> </tr> <tr> <td>County:</td> <td>Berks</td> </tr> <tr> <td>Customer Sample ID:</td> <td>Biosolids 09-7900</td> </tr> </table>	Lab Sample ID:	E13617	Date Received:	September 9, 2009	Date Sampled:	9/1/09	Report Date:	9/29/09	Sample type:	Composite	County:	Berks	Customer Sample ID:	Biosolids 09-7900
Lab Sample ID:	E13617														
Date Received:	September 9, 2009														
Date Sampled:	9/1/09														
Report Date:	9/29/09														
Sample type:	Composite														
County:	Berks														
Customer Sample ID:	Biosolids 09-7900														

RESULTS													
pH	Solids	Volatile	Tot-N	Org-N	NH <sub>4</sub> N	P	K	Mg	Ca	Na	Fe	Al	
@ 23.5	— % —					% (dry weight basis)							
7.8	21.87	66.34	5.10	4.59	0.52	1.69	0.10	0.37	5.05	0.09	1.43	0.87	
Mn	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn	PCB	Reactive CN	
mg/kg (dry weight basis)													
5425.3	2.69	4.32	124.9	500.1	140.8	3.20	40.2	63.3	7.96	1510.2	<1.23	< 2	

NR-Not Requested      One dry ton of this material is equivalent to      1096 gallons of wet material or      4.6 tons of wet material

PRIMARY NUTRIENT CONTENT			
% (dry wt basis)			
N	5.10	0.98	dry tons of this biosolid will supply 100 lbs of total N.
P <sub>2</sub> O <sub>5</sub>	3.87	2.96	dry tons of this biosolid will supply 100 lbs of P
K <sub>2</sub> O	0.12		

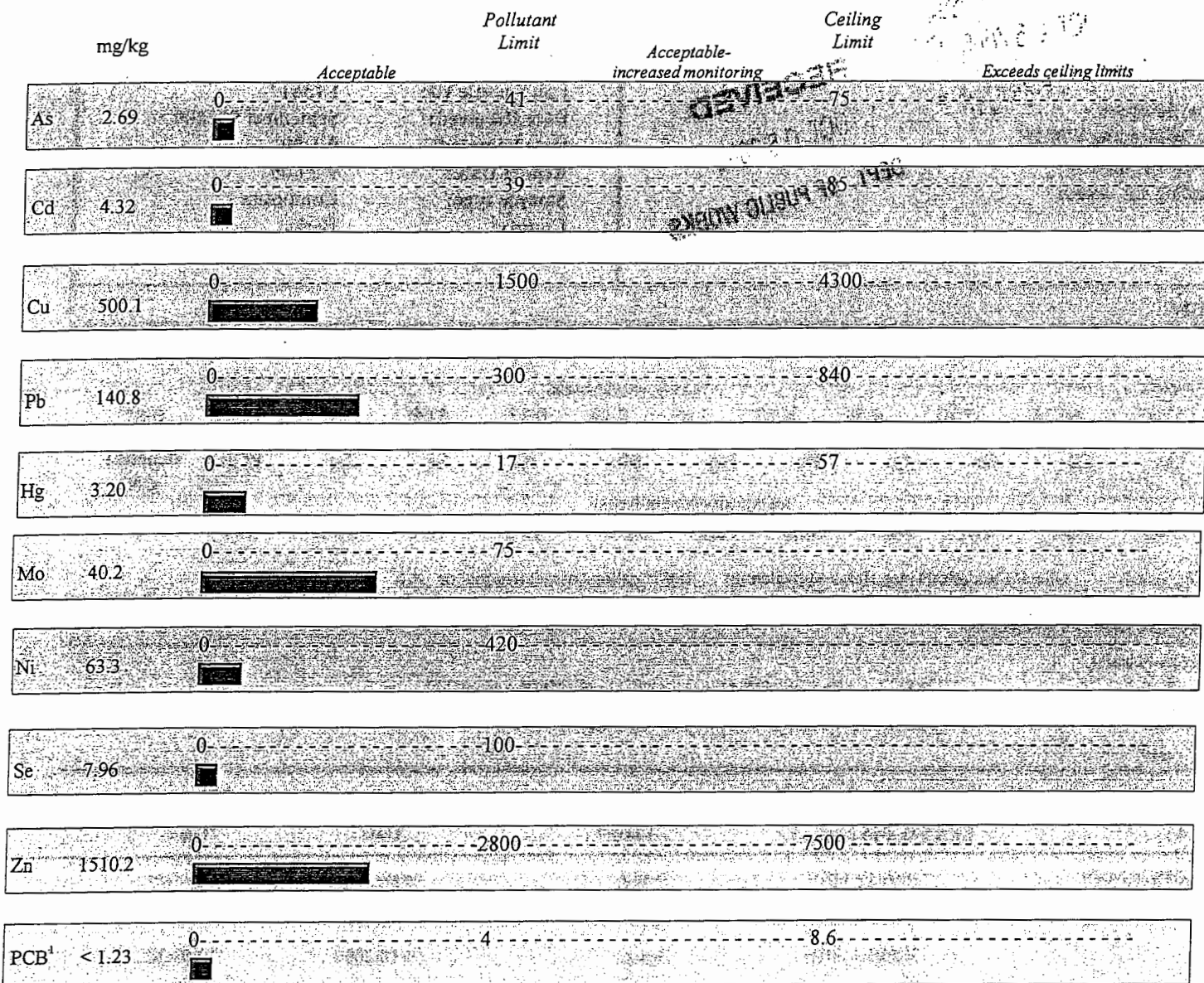
ANALYSIS INFORMATION FOR EPA 503 POLLUTANTS				
Analyte	EPA SW-846 Method	Analyst	Date	Time
Cd,Cu,Mo,Pb,Ni,Zn	3050B + 6010	Stecko	9/18/2009	10:03:30
As	3050B + 6010	Stecko	9/18/2009	10:03:30
Se	3050B + 6010	Stecko	9/18/2009	10:03:30
Hg	7473	Brooks	09/18/2009	10:00 AM
PCBs <sup>1</sup>	8082			

<sup>1</sup>Subcontracted to Fairway Laboratories, Inc., Altoona, PA

RAW LABORATORY BENCH DATA FOR EPA 503 POLLUTANTS									
	As	Cd	Cu	Hg	Mo	Ni	Pb	Se	Zn
Wet Wt. aliquot (g)	1.935	1.935	1.935	0.410	1.935	1.935	1.935	1.935	1.935
Analyte conc. in sample/ digest (mg/L except Hg)	0.023	0.037	4.23	0.286 ug	0.34	0.54	1.19	0.07	12.78
Method limit (mg/L except Hg)	0.015	0.005	0.015	0.0010 ug	0.015	0.005	0.020	0.015	0.008

Optional Analyses: Results (except soluble salts) on dry weight basis					Sample Receipt
Ni	N	Total Carbon	CCE	Soluble Salts	Ambient Temperature
(mg/kg)		(%)	Calcium Carbonate Equivalent (%)	(mmhos/cm)	
				Other:	

EPA REGULATIONS FOR LAND APPLICATION OF BIOSOLIDS (40 CFR Part 503) and  
DEP GUIDELINES FOR USE OF BIOSOLIDS FOR AGRICULTURAL UTILIZATION



<sup>1</sup>DEP limit only



## Analysis Report for Use of Biosolids on Cropland

Amy Morriss City of Reading WWTP 815 Washington St Reading PA 19601	<b>RECEIVED</b> DEC 02 2009 DEPT. OF PUBLIC WORKS	Lab Sample ID: E13680 Date Received: October 16, 2009 Date Sampled: 10/14/09 Report Date: 11/20/09 Sample type: Composite County: Berks Customer Sample ID: Biosolids 09-9272
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### RESULTS

pH	Solids	Volatile	Tot-N	Org-N	NH <sub>4</sub> N	P	K	Mg	Ca	Na	Fe	Al
@ 22.9	— % —					% (dry weight basis)						
8.0	19.20	68.11	5.61	4.95	0.67	2.10	0.10	0.42	5.16	0.12	1.24	0.89
Mn	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn	PCB	Reactive CN
mg/kg (dry weight basis)												
9476.5	3.36	5.05	298.4	572.2	611.9	3.62	61.2	66.6	11.85	1963.0	< .55	< 2

NR-Not Requested      One dry ton of this material is equivalent to 1249 gallons of wet material or 5.2 tons of wet material

### PRIMARY NUTRIENT CONTENT

% (dry wt basis)

total N	5.61	0.89	dry tons of this biosolid will supply 100 lbs of total N.
P <sub>2</sub> O <sub>5</sub>	4.80	2.39	dry tons of this biosolid will supply 100 lbs of P
K <sub>2</sub> O	0.12		

### ANALYSIS INFORMATION FOR EPA 503 POLLUTANTS

Analyte	EPA SW-846 Method	Analyst	Date	Time
Cd,Cu,Mo,Pb,Ni,Zn	3050B + 6010	Stecko	10/26/2009	10:20:29
As	3050B + 6010	Stecko	10/26/2009	10:20:29
Se	3050B + 6010	Stecko	10/26/2009	10:20:29
Hg	7473	Brooks	10/23/2009	10:00 AM
PCBs <sup>1</sup>	8082			

<sup>1</sup>Subcontracted to Fairway Laboratories, Inc., Altoona, PA

### RAW LABORATORY BENCH DATA FOR EPA 503 POLLUTANTS

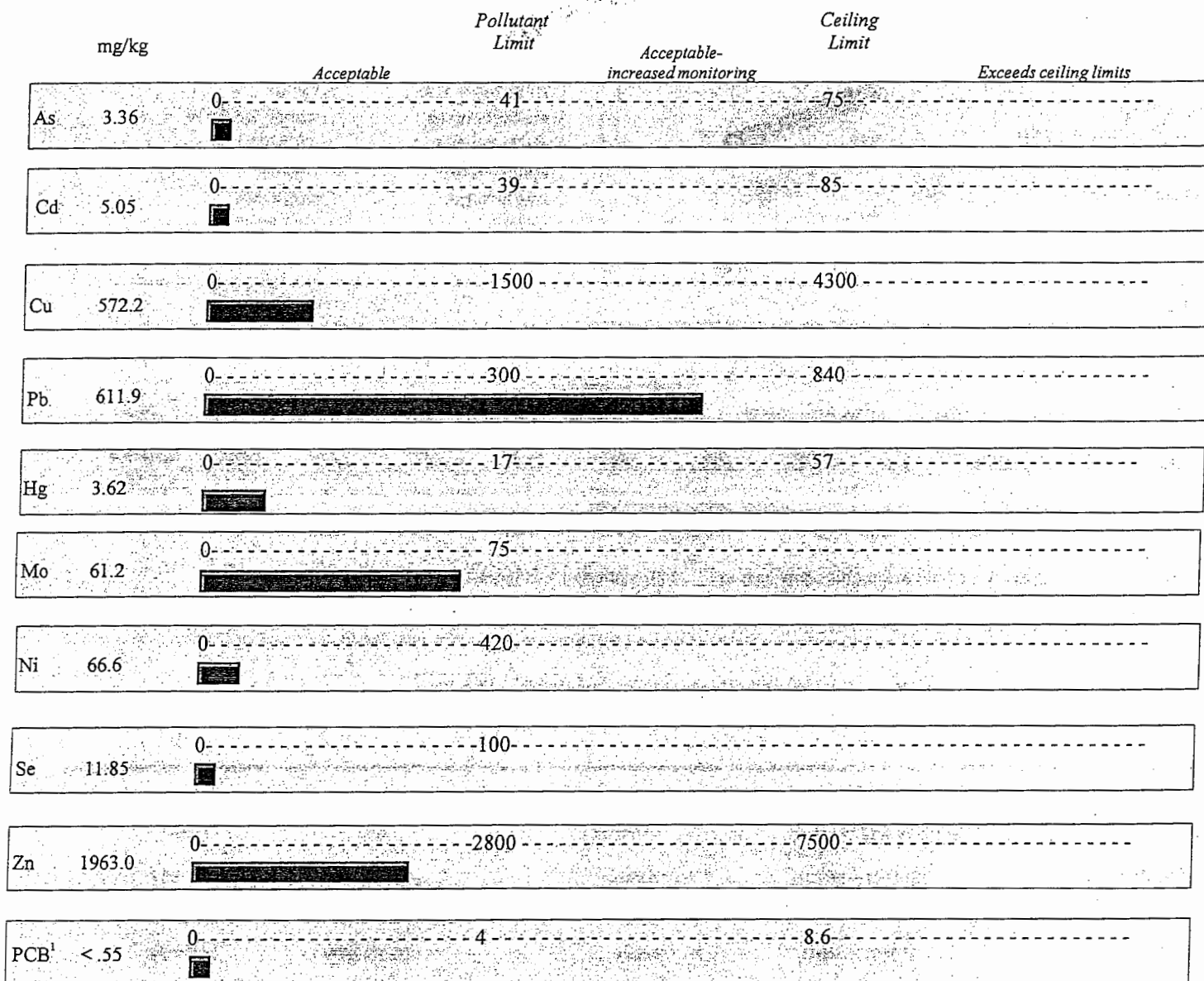
	As	Cd	Cu	Hg	Mo	Ni	Pb	Se	Zn
Wet Wt. aliquot (g)	1.904	1.904	1.904	0.450	1.904	1.904	1.904	1.904	1.904
Analyte conc. in sample/digest (mg/L except Hg)	0.025	0.037	4.18	0.313 ug	0.45	0.49	4.47	0.09	14.35
Method limit (mg/L except Hg)	0.015	0.005	0.015	0.0010 ug	0.015	0.005	0.020	0.015	0.008

### Optional Analyses: Results (except soluble salts) on dry weight basis

### Sample Receipt

te-N (mg/kg)	Total Carbon (%)	CCE Calcium Carbonate Equivalent (%)	Soluble Salts (mmhos/cm)	Other:	

**EPA REGULATIONS FOR LAND APPLICATION OF BIOSOLIDS (40 CFR Part 503) and  
DEP GUIDELINES FOR USE OF BIOSOLIDS FOR AGRICULTURAL UTILIZATION**



<sup>1</sup>DEP limit only



## Analysis Report for Use of Biosolids on Cropland

<p>Amv Morriss City of Reading WWTP 815 Washington St Reading PA 19601</p> <p><b>RECEIVED</b> DEC 18 2009 DEPT. OF PUBLIC WORKS</p>	<p>Lab Sample ID: E13726 Date Received: November 11, 2009 Date Sampled: 11/3/09 Report Date: 12/15/09 Sample type: Composite County: Berks Customer Sample ID: Biosolids</p>
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### RESULTS

pH	Solids	Volatile	Tot-N	Org-N	NH <sub>4</sub> N	P	K	Mg	Ca	Na	Fe	Al
@ 22.7	— % —					% (dry weight basis)						
7.9	19.36	64.99	5.18	4.60	0.59	1.99	0.10	0.39	6.66	0.10	1.18	0.85
Mn	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn	PCB	Reactive CN
mg/kg (dry weight basis)												
3807.9	3.31	4.05	165.2	541.4	283.1	3.10	50.2	57.3	8.1	1676.4	< .55	< 2

NR-Not Requested      One dry ton of this material is equivalent to      1239 gallons of wet material or      5.2 tons of wet material

### PRIMARY NUTRIENT CONTENT

% (dry wt basis)

1 N	5.18	0.96	dry tons of this biosolid will supply 100 lbs of total N.
P <sub>2</sub> O <sub>5</sub>	4.57	2.51	dry tons of this biosolid will supply 100 lbs of P
K <sub>2</sub> O	0.12		

### ANALYSIS INFORMATION FOR EPA 503 POLLUTANTS

Analyte	EPA SW-846 Method	Analyst	Date	Time
Cd,Cu,Mo,Pb,Ni,Zn	3050B + 6010	Stecko	11/20/2009	8:51:20
As	3050B + 6010	Stecko	11/20/2009	8:51:20
Se	3050B + 6010	Stecko	11/20/2009	8:51:20
Hg	7473	Brooks	11/19/2009	11:00 AM
PCBs <sup>1</sup>	8082			

<sup>1</sup>Subcontracted to Fairway Laboratories, Inc., Altoona, PA

### RAW LABORATORY BENCH DATA FOR EPA 503 POLLUTANTS

	As	Cd	Cu	Hg	Mo	Ni	Pb	Se	Zn
Wet Wt. aliquot (g)	2.376	2.376	2.376	0.430	2.376	2.376	2.376	2.376	2.376
Analyte conc. in sample/ digest (mg/L except Hg)	0.030	0.037	4.98	0.258 ug	0.46	0.53	2.60	0.07	15.42
Method limit (mg/L except Hg)	0.015	0.005	0.015	0.0010 ug	0.015	0.005	0.020	0.015	0.008

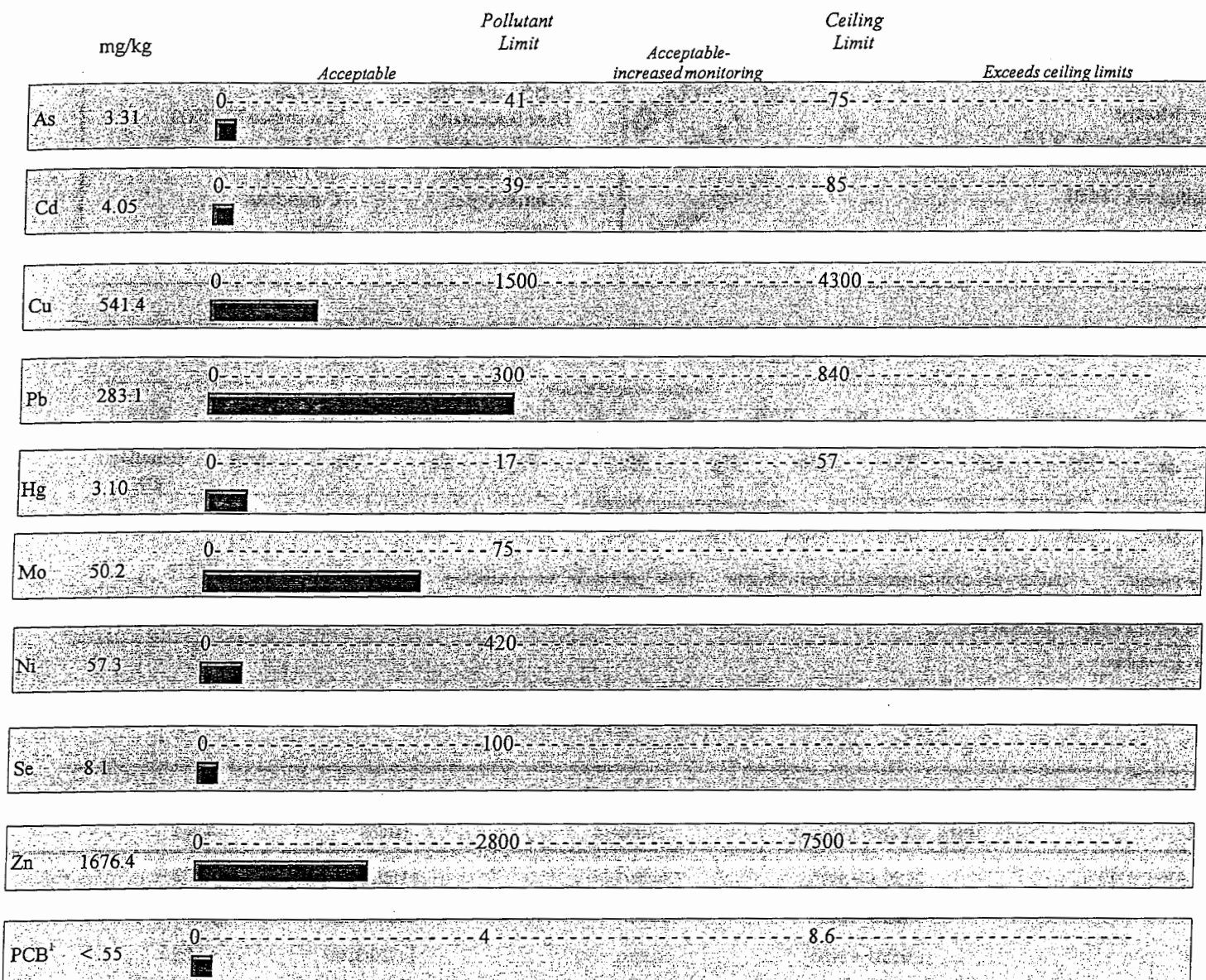
### Optional Analyses: Results (except soluble salts) on dry weight basis

### Sample Receipt

Nit N (mg/g)	Total Carbon (%)	CCE Calcium Carbonate Equivalent (%)	Soluble Salts (mmhos/cm)	Other:	Ambient Temperature



EPA REGULATIONS FOR LAND APPLICATION OF BIOSOLIDS (40 CFR Part 503) and  
DEP GUIDELINES FOR USE OF BIOSOLIDS FOR AGRICULTURAL UTILIZATION



<sup>1</sup>DEP limit only





# Analysis Report for Use of Biosolids on Cropland

REC'D  
DEC 29 2009  
DEPT. OF PUBLIC WORKS

Amy Morriss City of Reading WWTP 815 Washington St Reading PA 19601	Lab Sample ID: E13765 Date Received: December 8, 2009 Date Sampled: 12/2/09 Report Date: 12/23/09 Sample type: County: Berks Customer Sample ID: Biosolids
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## RESULTS

pH	Solids	Volatile	Tot-N	Org-N	NH <sub>4</sub> N	P	K	Mg	Ca	Na	Fe	Al
@ 22 C	— % —					mg/kg (dry weight basis)						
8.0	17.54	69.80	5.77	5.00	0.76	2.14	0.10	0.40	4.90	0.11	1.05	0.82
Mn	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn	PCB	Reactive CN
mg/kg (dry weight basis)												
6804.2	2.31	3.58	112.5	531.1	175.4	2.45	51.2	46.8	10.79	1487.8	< .31	< 2

NR-Not Requested      One dry ton of this material is equivalent to      1367 gallons of wet material or      5.7 tons of wet material

## PRIMARY NUTRIENT CONTENT

% (dry wt basis)		
T-N	5.77	0.87 dry tons of this biosolid will supply 100 lbs of total N.
P <sub>2</sub> O <sub>5</sub>	4.89	2.34 dry tons of this biosolid will supply 100 lbs of P
K <sub>2</sub> O	0.12	

## ANALYSIS INFORMATION FOR EPA 503 POLLUTANTS

Analyte	EPA SW-846 Method	Analyst	Date	Time
Cd,Cu,Mo,Pb,Ni,Zn	3050B + 6010	Stecko	12/18/2009	12:22:11
As	3050B + 6010	Stecko	12/18/2009	12:22:11
Se	3050B + 6010	Stecko	12/18/2009	12:22:11
Hg	7473	Brooks	12/16/2009	10:00 AM
PCBs <sup>1</sup>	8082			

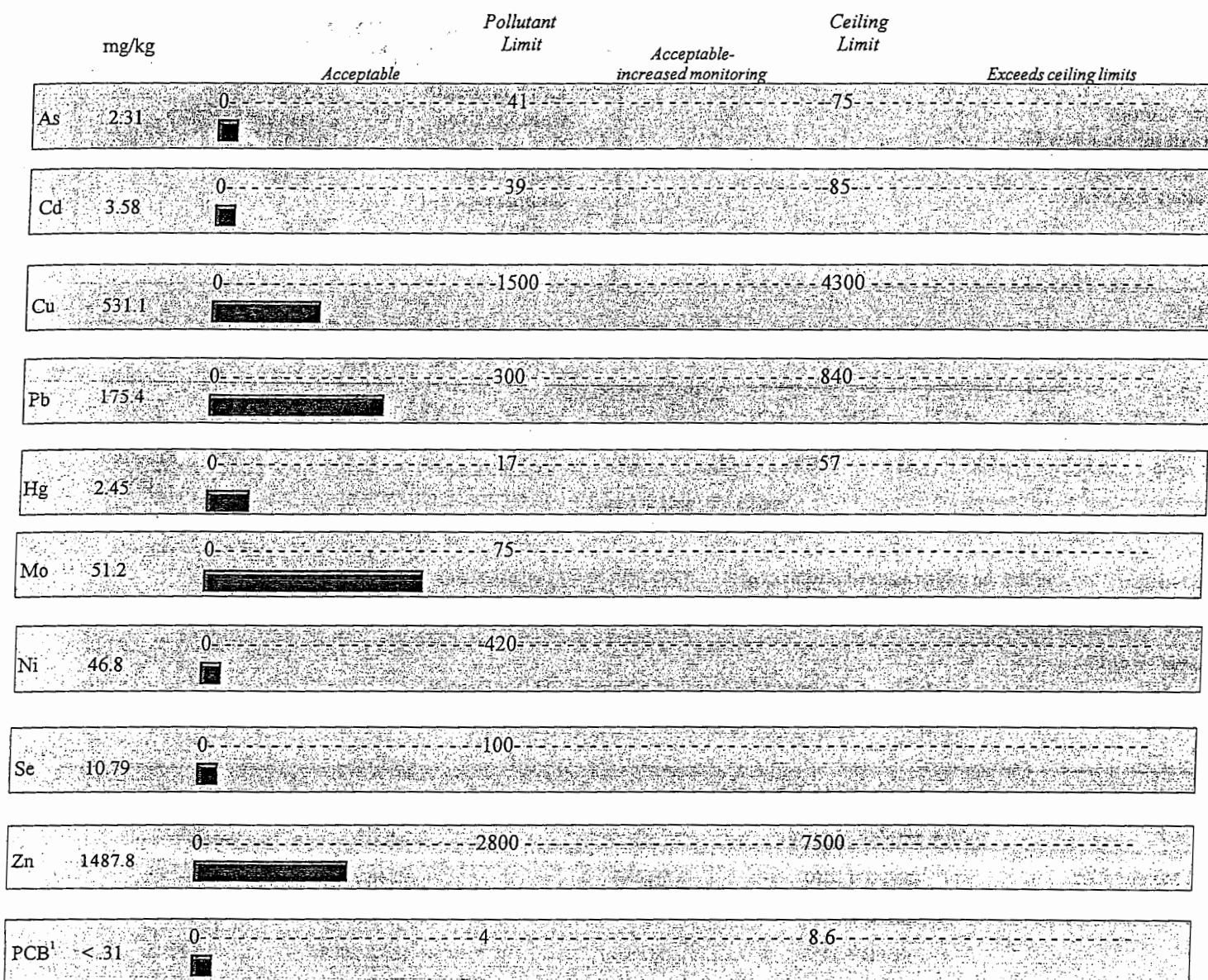
<sup>1</sup>Subcontracted to Fairway Laboratories, Inc., Altoona, PA

## RAW LABORATORY BENCH DATA FOR EPA 503 POLLUTANTS

	As	Cd	Cu	Hg	Mo	Ni	Pb	Se	Zn
Wet Wt. aliquot (g)	2.016	2.016	2.016	0.489	2.016	2.016	2.016	2.016	2.016
Analyte conc. in sample/digest (mg/L except Hg)	0.016	0.025	3.76	0.210 ug	0.36	0.33	1.24	0.08	10.52
Method limit (mg/L except Hg)	0.015	0.005	0.015	0.0010 ug	0.015	0.005	0.020	0.015	0.008

Optional Analyses: Results (except soluble salts) on dry weight basis					Sample Receipt
titrate mg/kg	Total Carbon (%)	CCE Calcium Carbonate Equivalent (%)	Soluble Salts (mmhos/cm)	Other:	Ambient Temperature

EPA REGULATIONS FOR LAND APPLICATION OF BIOSOLIDS (40 CFR Part 503) and  
DEP GUIDELINES FOR USE OF BIOSOLIDS FOR AGRICULTURAL UTILIZATION



<sup>1</sup>DEP limit only

## Fecal Coliform for Biosolids

Sample Date	Sample ID	Analyst	Result Colonies/gram
1/20/2009	#1	HRP	127,727
1/20/2009	#2	HRP	82,231
1/22/2009	#3	JAH	38,840
1/22/2009	#4	HRP	38,464
1/23/2009	#5	HRP	77,362
1/23/2009	#6	HRP	80,298
1/23/2009	#7	HRP	68,237
2/9/2009	#1	HRP	81,065
2/9/2009	#2	HRP	8,700
2/10/2009	#3	RCR	104,917
2/11/2009	#4	RCR	235,924
2/11/2009	#5	JAH	57,716
2/11/2009	#6	JAH	60,076
2/12/2009	#7	HRP	70,144
3/3/2009	#1	HRP	74,259
3/3/2009	#2	HRP	115,195
3/4/2009	#3	HRP	102,415
3/4/2009	#4	HRP	83,210
3/5/2009	#5	JAH	8,257
3/5/2009	#6	JAH	5,497
3/6/2009	#7	JAH	21,322
4/13/2009	#1	JAH	30,732
4/13/2009	#2	JAH	29,248
4/13/2009	#3	JAH	26,676
4/14/2009	#4	JAH	17,888
4/14/2009	#5	JAL	13,182
4/15/2009	#6	JAL	76,440
4/15/2009	#7	JAL	66,712
5/12/2009	#1	JAH	49,950
5/12/2009	#2	JAH	53,654

## Fecal Coliform for Biosolids

Sample Date	Sample ID	Analyst	Result Colonies/gram
5/13/2009	#3	JAH	44,259
5/13/2009	#4	JAH	10,825
5/15/2009	#5	RDP	73,085
5/15/2009	#6	RDP	29,791
5/15/2009	#7	RDP	42,025
6/2/2009	#1	JAL	37,736
6/2/2009	#2	JAL	29,360
6/3/2009	#3	JAH	59,952
6/3/2009	#4	JAH	23,053
6/4/2009	#5	JAH	103,211
6/5/2009	#6	JAL	330,882
6/6/2009	#7	JAL	29,731
7/9/2009	#1	JAL	28,889
7/9/2009	#2	JAL	9,288
7/13/2009	#3	JAH	9,760
7/13/2009	#4	JAH	15,758
7/14/2009	#5	JAH	17,431
7/14/2009	#6	JAH	5,308
7/14/2009	#7	JAL	33,308
8/11/2009	#1	RDP	85,003
8/11/2009	#2	RDP	95,617
8/12/2009	#3	JAL	97,496
8/12/2009	#4	JAL	81,906
8/13/2009	#5	JAH	38,160
8/13/2009	#6	JAH	46,202
8/17/2009	#7	RDP	97,531
9/8/2009	#1	RDP	45,568
9/8/2009	#2	RDP	30,904
9/9/2009	#3	RCR	54,658
9/9/2009	#4	RCR	36,848

Fecal Coliform for Biosolids			
Sample Date	Sample ID	Analyst	Result Colonies/gram
9/10/2009	#5	RDP	27,842
9/10/2009	#6	RDP	45,674
9/14/2009	#7	JAL	105,995
10/14/2009	#1	RCR	6,961
10/14/2009	#2	RCR	17,296
10/21/2009	#3	JAL	210,636
10/15/2009	#4	JAH	47,867
10/19/2009	#5	JAH	61,050
10/19/2009	#6	JAH	27,306
10/20/2009	#7	JAH	20,132
11/16/2009	#1	JPH	35,258
11/16/2009	#2	JPH	30,790
11/17/2009	#3	JAH	198,841
11/17/2009	#4	JAH	183,462
11/18/2009	#5	JAH	90,805
11/18/2009	#6	JAH	85,248
11/18/2009	#7	JAH	82,726
12/8/2009	#1	JAH	78,106
12/8/2009	#2	JAH	93,606
12/9/2009	#3	JAL	91,697
12/10/2009	#4	JAL	72,761
12/10/2009	#5	JAL	48,001
12/12/2009	#6	JAH	54,559
12/12/2009	#7	JAH	66,852

Report completed by:

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